

JE NO. 106

~~SECURITY INFORMATION~~
~~CLASSIFIED~~ PER T

DS
918
.N673
1951
c.2

GENERAL HEADQUARTERS FAR EAST COMMAND
MILITARY INTELLIGENCE SECTION, GENERAL STAFF
U.S. ARMY MILITARY HISTORY INSTITUTE
CARLISLE BARRACKS, PA 17013-5008

UNCLASSIFIED
(ALLIED TRANSLATOR AND INTERPRETER SECTION)

MM
HIST

RESEARCH SUPPLEMENT
INTERROGATION REPORTS
NORTH KOREAN ARTILLERY

LIBRARY
ARMY WAR COLLEGE
PERIODICALS SECTION
JAN 09 1952
COPY 1

This document is now unclassified, as shown on the cover or title page, and all other markings found on any pages are obsolete. If any photocopies are made of this document, all markings, other than UNCLASSIFIED, on each page should be obliterated so that there is no misunderstanding of the current classification of any information derived from it.

REGRADED UNCLASSIFIED BY
AUTHORITY OF DOD DIR. 5200.1 R
BY RAKERS ON 758094
760374.

DOWNGRADED AT 12 YEAR INTERVALS.
NOT AUTOMATICALLY DECLASSIFIED
DOD DIR 5200.10

MANILA • MELBOURNE • MORESBY • MANILA • TOKYO

UNCLASSIFIED PER TAG
760374

~~SECURITY INFORMATION~~

~~SECRET~~

17640-51

REGULATIONS ON INSIDE COVER

UNCLASSIFIED

WARNING

This document contains information affecting the national defense of the United States within the meaning of the Espionage Laws, Title 18, USC, Sections 793 and 794. The transmission or the revelation of its contents in any manner to an unauthorized person is prohibited by law. It is imperative that this document be safeguarded at all times, and that the material contained in it be treated with the utmost discretion. Under no circumstances shall possession thereof, or the information therein, be given to any personnel other than those whose duties specifically require knowledge thereof. When not in use, this document is chargeable to the custody of an officer. See para II, 27, 29, 33, AR 380-5, 15 November 1949.

UNCLASSIFIED

U.S. ARMY MILITARY HISTORY INSTITUTE

**GENERAL HEADQUARTERS
FAR EAST COMMAND
Military Intelligence Section, General Staff
Allied Translator & Interpreter Section**

19 November 1951

**RESEARCH SUPPLEMENT
INTERROGATION REPORT NO. 106
NORTH KOREAN ARTILLERY**

This report summarizes significant information concerning the artillery arm of the North Korean Army obtained from on-the-spot interrogations of enemy prisoners of war and deserters and Republic of Korea refugees, translations of captured enemy documents, and other parallel sources.

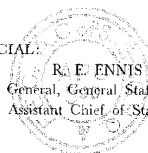
Recipients are cautioned that this report is based primarily on prisoner of war interrogations and information contained herein is not completely evaluated. Subsequent interrogations will undoubtedly bring to light additional data upon which revision and correction of this material will have to be made in future interrogation reports.

Immediately upon capture, enemy prisoners of war are interrogated briefly by capturing units to obtain front line intelligence. They are then transported to United Nations' prisoner of war enclosures where they receive a detailed interrogation by Advanced ATIS interrogation teams of highly-trained U.S. Army and Air Force interrogators. The resulting individual reports are then delivered by air courier to ATIS Headquarters in TOKYO for collation and dissemination.

BY COMMAND OF GENERAL RIDGWAY:

DOYLE O. HICKEY
Lieutenant General, General Staff with Troops
Chief of Staff

OFFICIAL:
R. E. FENNIS
Major General, General Staff with Troops
Assistant Chief of Staff, G2



UNCLASSIFIED

~~CONFIDENTIAL~~
~~CONFIDENTIAL~~

PROPERTY OF US ARMY

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

~~CONFIDENTIAL~~

UNCLASSIFIED

C 9276

ATIS INTERROGATION REPORT NO. 106

TABLE OF CONTENTS

	Page
TABLE OF CONTENTS	i
HIGHLIGHTS	iii
NORTH KOREAN ARTILLERY	
1. GENERAL	2
2. ARTILLERY TACTICS	6
a. General	6
b. Offensive Employment of Artillery	8
c. Defensive Employment of Artillery	13
d. Artillery Marches	18
e. Selection and Organization of Firing Positions	19
f. Ammunition Supply	22
g. Conduct of Fire	24
3. ARTILLERY ORGANIZATION AND EQUIPMENT	26
a. General	26
b. GHQ and Corps Artillery	28
CHART 1: GHQ and Corps Artillery of the NK Army	
c. Divisional Artillery	31
(1) General	31
CHART 2: Organic Artillery of the NK Infantry Division	
(2) Divisional Field Artillery Regiment ..	31
CHART 3: Divisional Field Artillery Regiment of the NK Army	
(a) General	31
(b) Regimental Headquarters	31
(c) 76mm Gun Battalion	32
(d) 122mm Howitzer Battalion	33
(3) Divisional Antitank Battalion	33
CHART 4: Divisional Antitank Battalion of the NK Army	
(4) Divisional Self-propelled Gun Battalion	34
CHART 5: Divisional Self-propelled Gun Battalion of the NK Army	
d. Regimental Artillery	35
CHART 6: Organic Artillery of the Typical NK Rifle Regiment	
(1) General	35
(2) 76mm Howitzer Battery	36
(3) Antitank Company	36
(4) 120mm Mortar Company	36
e. Battalion Artillery	37
(1) General	37
(2) 82mm Mortar Company	37
(3) Antitank Gun Platoon	37
(4) Antitank Rifle Platoon	38
4. ARTILLERY COMMUNICATIONS	38
SKETCH 1: Artillery Wire Network of the NK Infantry Division	
SKETCH 2: Artillery Radio Nets of the NK Infantry Division	

UNCLASSIFIED

~~CONFIDENTIAL~~

	Page
5. ARTILLERY TRAINING	40
a. General	40
b. Officer Training	41
c. Artillery Ordnance Training	42
d. Enlisted Training	43
6. ARTILLERY POTENTIAL AND EFFECTIVENESS OF NORTH KOREAN COMBAT UNITS	45
a. General	45
b. North Korean I Corps	45
(1) Corps Artillery	45
(2) North Korean 8th Infantry Division	46
(3) North Korean 17th Mechanized Division	47
(4) North Korean 23d Infantry Division	49
(5) North Korean 47th Infantry Division	49
c. North Korean II Corps	50
(1) Corps Artillery	50
(2) North Korean 2d Infantry Division	51
(3) North Korean 13th Infantry Division	54
(4) North Korean 27th Infantry Division	56
d. North Korean III Corps	58
(1) Corps Artillery	58
(2) North Korean 1st Infantry Division	59
(3) North Korean 15th Infantry Division	61
(4) North Korean 45th Infantry Division	64
e. North Korean IV Corps	65
(1) Corps Artillery	65
(2) North Korean 4th Infantry Division	66
(3) North Korean 5th Infantry Division	66
(4) North Korean 10th Infantry Division	67
(5) North Korean 26th Infantry Division	68
(6) North Korean 105th Tank Division	69
f. North Korean V Corps	69
(1) Corps Artillery	69
(2) North Korean 6th Infantry Division	69
(3) North Korean 12th Infantry Division	70
(4) North Korean 32d Infantry Division	72
g. North Korean VI Corps	72
(1) Corps Artillery	72
(2) North Korean 9th Infantry Division	73
(3) North Korean 18th Infantry Division	73
(4) North Korean 19th Infantry Division	74
h. North Korean VII Corps	75
(1) Corps Artillery	75
(2) North Korean 3d Infantry Division	75
(3) North Korean 7th Infantry Division	76
(4) North Korean 24th Infantry Division	77
(5) North Korean 37th Infantry Division	77
(6) North Korean 46th Infantry Division	77
(7) North Korean 63d Brigade	78
INDEX	79

~~SECRET SECURITY INFORMATION~~

RESEARCH SUPPLEMENT
INTERROGATION REPORTS

Issue No. 106
NORTH KOREAN ARTILLERY

HIGHLIGHTS

As a result of the expert tutelage and material support furnished by the USSR, the artillery arm of the North Korean Army was initially superior to that of any other Oriental nation. At higher echelons the artillery reserve at the start of the invasion consisted of one artillery regiment assigned to the North Korean GHQ and an additional artillery regiment for each of the two corps that were in existence then. Because of shortages in artillery equipment, the low mobility of North Korean artillery and the pronounced impediments to lateral movement in KOREA, the enemy has found it preferable to concentrate the bulk of his artillery support potential within the infantry division. The organic artillery support of the typical North Korean infantry division patterns itself closely after that of the old-type Soviet rifle division of World War II. It consists of an antitank battalion, a self-propelled gun battalion and a mixed field artillery regiment comprised of two battalions of 76mm guns and one battalion of 122mm howitzers. Pages 2, 27 and 29.

The reconstituted North Korean Army unit recently disposed of very little artillery and therefore was forced to restrict its combat operations to night maneuvers, using darkness as a cover under which combat troops, supported largely by mortars and automatic weapons, could approach within assaulting distance of UN positions. North Korean commanders customarily concentrate most of their weapons in the sector of the main effort. However, a ratio of one artillery battalion to a regiment of infantry and an artillery battery to an infantry battalion serves the enemy as a rule of thumb in determining normal artillery support requirements. Pages 2, 4 and 7.

North Korean offensive doctrine, mirroring that of the Soviet Army, calls for rapidity of maneuver to the flanks culminating in a single or double envelopment under cover of the concentrated fire of all supporting weapons. To provide the basis of fire required for the execution of this maneuver, the enemy has adopted the Soviet groupment technique. In accordance with an estimate of the artillery requirements prepared by the artillery commander, all available artillery, including that organic to subordinate units, may be formed into groupments tailored to meet the requirements of each phase of the projected operation. Page 8.

Only by falling back on Soviet defensive tactics and by utilizing such passive measures as camouflage and night movement was the enemy able to preserve a modicum of tactical efficiency. The lack of adequate communications was probably an important factor in motivating the North Korean Army to adopt the Soviet concept of decentralized defense. Under this system, the bulk of artillery and other supporting weapons are attached to the

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

strong-points comprising the defense zone and, except for certain preconceived missions concerned primarily with coordinated fire on the final protective line, operate under decentralized control. Pages 4 and 14

While artillery communications facilities in the North Korean Army were never elaborate by Western standards, they were established in consonance with sound Soviet signal doctrine and, initially at least, were adequate to the needs of North Korean artillery. Standard signal doctrine of the enemy provides for an artillery communications system comprised of a command net and a staff net. Although wire is the primary means of communications, the command net telephone system is paralleled by a radio network for use in fluid situations or when the wire system fails. However, as signal communications became increasingly more unreliable with the progress of the war, they seriously handicapped North Korean artillery. Thus, although the fire control system used by the North Korean Army theoretically permits the massing of fires of the entire division artillery, actually, due to lack of communications facilities, the battery is the normal firing unit. Pages 5, 26 and 38

Prior to the invasion North Korean artillery personnel received comparatively extensive and, according to North Korean Army standards, thorough artillery training. However, the quality of training deteriorated sharply in the course of the war due to a progressive curtailment of training cycles aimed at meeting the urgent need for artillery replacements. But since the early part of spring 1951 there have been indications of centralized training of artillery units at levels higher than division and of a growing concern on the part of the North Korean High Command for raising the combat effectiveness of artillery units. Pages 5, 40 and 45

A fairly detailed and current account of the organization, training and combat record of artillery elements organic to major North Korean combat units has been compiled from PW information and projected against the background history of the supported major unit. The account reveals that in the reorganization phase that followed the defeat of the North Korean Army in the fall of 1950, combat divisions of the enemy retained the framework of their artillery structure but were almost completely lacking in organic artillery weapons. Toward the end of May 1951, the North Korean corps on line began to receive new weapons from the USSR which restored their artillery support almost to T/E strength. With the retention of a major portion of this armament as a general reserve under corps control, the support potential of the corps artillery reserve has in many cases been boosted to a level that approximates North Korean artillery capabilities at the time of the initial invasion. Pages 2, 30, 45 to 78

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

RESEARCH SUPPLEMENT
INTERROGATION REPORTS

Issue No. 106

This report summarizes significant information concerning North Korean Forces obtained by U.S. Army and FEAF intelligence agencies operating in the Korean battle area. Primary sources of information for this report include the following:

(1) On-the-spot interrogation by highly-trained interrogators of North Korean and Chinese Communist PsW and deserters, Republic of KOREA (ROK) refugees and military personnel, and members of the UN Armed Forces.

(2) Translations by ATIS of captured enemy documents, periodicals, diaries, etc.

(3) Other parallel sources when appropriate.

(4) In addition, so as to provide a certain amount of background material and to present the sometimes fragmentary interrogation information in its proper setting, material culled from other sources than those referred to above has been utilized. Whenever this has been done the source has been clearly identified in the text.

Using agencies, when evaluating information in this report stemming from interrogation reports, should take the following factors into consideration:

(1) As a source of detailed, authentic information about the enemy, interrogations are of inestimable value when properly analyzed and evaluated on a continuing basis. Information contained in this report is not considered final and will be modified or changed in future publications as additional material becomes available.

(2) Individual interrogation reports upon which this study is based have already been reproduced and disseminated separately. Care must be exercised, therefore, to ascertain that this collated summary is not accepted as confirmation of these individual interrogations.

When, in the text of this report, a locale is mentioned initially, the place name is given first followed by the geographic coordinates (coordinates used are those contained in Gazetteer to Maps of KOREA, Map Series AMS L551, dated September 1944). Thereafter the name alone is used. Place names marked with an asterisk (*) could not be accurately located.

In utilizing the information contained in this volume, consideration should, furthermore, be given to the fact that the first portion of this report deals with the tactical employment and organization of the North Korean artillery arm under typical conditions. In particular, the portion of this report devoted to the organization and equipment of artillery units reflects only the T/O&E of the North Korean infantry division at the time of the invasion on 25 June 1950 and should not be construed to show modifications that were effected in the typical structure as a result of war-time exigencies. The last portion of this report, on the other hand, traces historically the evolution of the organic artillery support of major North Korean combat units and brings out the current battlefield artillery structure as revealed by interrogation sources.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

NORTH KOREAN ARTILLERY

1. GENERAL

An analysis of 649 PW interrogation reports, 25 captured enemy documents and 24 parallel sources of information reveals that, the artillery arm of the North Korean Army was initially superior to that of any other Oriental nation. Under the watchful eye of Soviet advisors, North Korean field artillery, in its organizational structure, was patterned after the Soviet division artillery of World War II. Equipped with Soviet arms and steeped in the tactical doctrine of the Soviet Army, the artillery support of the North Korean Army was more than adequate to crush any foreseeable resistance on the part of the Republic of KOREA. However, initial tactical successes imbued the enemy with such optimism that even normal security precautions were neglected and North Korean troops, unaccustomed to defensive measures of any kind, even threw away their entrenching tools. Consequently, the mounting intensity of UN air and artillery strikes took a tremendous toll of lives and equipment. Since trained reserves were not available in sufficient numbers, the North Korean Army was forced to rely on newly-inducted and poorly-indoctrinated recruits. This, of course, played havoc with artillery units, the combat effectiveness of which stands in direct relation to the experience and technical proficiency of their personnel. Of even greater consequence in the deterioration of the artillery support potential, however, was the logistical problem involved. Due to their bulk and weight, artillery equipment and supplies were generally moved over main roads or rail lines and thus became prime targets for UN interdiction aircraft. As a result, destroyed or damaged artillery equipment became more and more difficult to replace with the progress of the war and the flow of ammunition was reduced to a point where it imposed severe limitations on the enemy artillery support potential. The UN counteroffensive in September 1950 and deep envelopment of practically all North Korean combat units through the amphibious landing at INCHON (37°28'N-126°38'E) occasioned further crippling losses in artillery equipment and supplies, large quantities of which had to be abandoned or buried by the enemy in his headlong flight north. Consequently, the reconstituted North Korean Army until recently disposed of very little artillery and therefore was forced to restrict its combat operations to night maneuvers, using darkness as a cover under which combat troops supported primarily by mortars and automatic weapons could approach within assaulting distance of UN positions. There are indications, however, that toward the end of May 1951 combat divisions of the North Korean corps on line began to receive new weapons from the USSR which restored their artillery support almost to T/E strength. With the retention of a major portion of this armament as a general reserve under corps control, the support potential of the corps artillery reserve has been boosted to a level that approximates North Korean artillery capabilities at the time of the initial invasion.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

Until this recent increase in Soviet logistical support made it feasible to retain a greater proportion of the available artillery at corps level, the North Korean enemy found it preferable to concentrate most of his artillery support within the infantry division because of severe shortages in artillery weapons, the low mobility of his artillery and the difficulties imposed on the rapid movement of field artillery by the mountainous terrain of KOREA and the UN air interdiction of hostile lines of communication. Accordingly, the artillery reserve at higher echelons was low and initially consisted of one artillery regiment assigned to the North Korean GHQ plus an additional artillery regiment for each of the two corps that were in existence at the start of the invasion. While not entirely uniform in structure, the typical regiment of this type contained three identical battalions, each of which was composed of two 122mm gun batteries and one 122mm howitzer battery plus the usual service elements. The regimental headquarters performed an exclusively administrative function. With the defeat of the North Korean Army in the fall of 1950 and the subsequent disintegration of the enemy's artillery arm, new corps artillery units were activated. Their organizational structure varied widely and was determined by the availability of weapons and personnel. Nevertheless, the artillery regiment, though generally understrength in personnel and equipment, remains the normal artillery reserve at corps level. The divisional artillery consists of one artillery regiment composed of a regimental headquarters, two battalions equipped with a total of 24 76mm guns and one battalion of 12 122mm howitzers. In addition, however, and independent of the artillery regiment, an antitank battalion and a battalion of self-propelled artillery are included in the infantry division table of organization.

Moreover, each infantry regiment and battalion is provided with its own organic supporting weapons. Within the infantry regiment organic artillery support is provided by one artillery battery equipped with four 76mm howitzers, one antitank company with six 45mm antitank guns and one mortar company with six 120mm mortars. Each rifle battalion of the infantry regiment has one organic mortar company equipped with nine 82mm mortars and one antitank company with nine 14.5mm antitank rifles and two 45mm antitank guns.

In the tactical employment of its artillery weapons, the North Korean Army appears to rely on a modified version of Soviet doctrine. As applied by the North Korean Army, this doctrine calls for the organization of all available artillery into groupments tailored to meet the requirements of each phase of the projected operation. In an offensive situation the North Korean plan of battle normally calls for the concentration of all available fire power to cover a rapid maneuver to the flanks culminating in a single or double envelopment. For purposes of tactical control and to facilitate planning, each attack operation is divided into three phases: preparatory fire, assault support fire and fire during the period of penetration and consolidation. During the period of preparatory fire the centralized control necessary to its

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

effective application is assured by holding the bulk of artillery in general support and by assigning specific fire missions to all artillery groupments in the unit operations plan. With the crossing of a predetermined phase line during the assault, however, this same operations plan provides for the decentralization of control by assigning to the bulk of artillery units missions of direct assistance to subordinate combat teams. While North Korean commanders customarily concentrate most of their supporting weapons in the sector of the main effort, so that the amount of artillery in support of subordinate units varies in accordance with the plan of maneuver, a ratio of one artillery battalion to a regiment of infantry and an artillery battery to an infantry battalion serves the enemy as a rule of thumb in determining normal artillery support requirements.

The North Korean Army, not anticipating any serious opposition in the drive southward, appears to have stressed the offensive phase of combat in its prewar training program. Hence, the enemy's combat forces were singularly unprepared to assume the defensive posture that was eventually forced upon them by the growing strength of the UN Army. Only by falling back on Soviet defensive tactics and by utilizing such passive measures as camouflage and night movement was the enemy able to preserve a modicum of tactical efficiency. Generally speaking, the North Korean version of Soviet defensive doctrine calls for either a positional or a mobile defense. In the former case, the enemy fortifies advantageous terrain and stands fast in an attempt to inflict heavy losses on UN Forces as a preliminary to the launching of an all-out counterattack. In a situation of this kind the defensive position consists of independent strong-points organized in depth into three belts of resistance, with the bulk of artillery concentrated in support of the main line of resistance. Control is decentralized; but full artillery coverage along the entire front is assured by assigning priority missions and sectors of responsibility in the division fire plan. A system of obstacles, designed to channelize mechanized attacks into previously registered concentrations of supporting weapons, occupies the intermediate ground between strong-points. Contrasting in some respects with the technique of positional defense, a mobile defense, according to North Korean concept, calls for delaying action in successive positions to trade space for time. In executing this maneuver each unit occupies two lines of defense simultaneously. Part of the artillery is attached to units in the forward positions, while the remainder is concentrated in the rear in general support. Weapons are emplaced to permit engagement of UN Forces at maximum ranges in order to force deployment of troops and time-consuming assault preparations. Before forward elements can be pinned down, they withdraw under fire cover furnished by supporting weapons emplaced at the rear positions. Artillery displaces by echelon to permit continuous fire support.

In an offensive situation, artillery positions are selected well forward to facilitate support of a breakthrough. On the other hand, in defensive combat,

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

artillery is echeloned in depth to afford fire cover throughout the defense zone. Positions inaccessible to tanks and offering good cover and concealment as well as unrestricted fields of fire are considered ideal. The occupation of positions is usually undertaken at night. Immediately upon the occupation of positions, North Korean artillerymen, if time permits, run a position and target area survey. The data thus obtained are plotted on firing charts which, enemy prisoners insist, are very accurate. Nevertheless, whenever possible the batteries register in and arrive at a "K" correction. Meteorological data, however, are not utilized nor is there any indication that modern fire direction center procedures are used. Due in part no doubt to the shortage of ammunition, very little unobserved fire is conducted. Indeed, shortages of ammunition, weapons and particularly communications equipment have seriously handicapped North Korean artillery. For example, although the fire control system used by the North Korean Army theoretically permits the massing of fires of the entire division artillery, actually, due to lack of communications equipment, the battery is the normal firing unit.

While artillery communication facilities in the North Korean Army were never elaborate by western standards, initially at least they were adequate and were organized in consonance with a sound signal doctrine adopted from the Soviet Army. In accordance with that doctrine, signal sections at each level of command down to and including the battery are responsible for maintaining communications with subordinate echelons and with supported units. Artillery units conform to standard communications procedure in placing primary reliance on telephone circuits and using radio only in a supplementary role except in fluid situations. Communication nets are patterned after those of Soviet artillery units and theoretically permit the immediate massing of all division artillery fires. With the progress of the war, however, signal communication in North Korean artillery units has become increasingly unreliable. The dearth of skilled personnel as well as acute deficiencies of signal equipment have forced North Korean signal personnel to utilize any available expedient without regard to operational efficiency. Runners and visual signals often must be relied upon in place of telephones and radios to transmit target and firing data. Aggravating actual material shortages, the inferior quality of some of the Soviet-furnished equipment imposes an additional strain on the artillery communication system. These logistical difficulties, coupled with those incident to a forced reliance on untrained recruits, have in many instances reduced North Korean artillery communication methods to a very primitive level. To this fact, perhaps more than to any other factor, may be attributed the generally low effectiveness of North Korean artillery in combat.

Artillery training prior to the invasion seems to have been comparatively thorough when judged by North Korean Army standards, but deteriorated sharply during the course of the war due to a progressive curtailment of training cycles aimed at meeting the urgent need for artillery replacements. Artillery courses at the 1st

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

Military Officers' Training School, for instance, which during the prewar period lasted approximately 16 months, were shortened to as little as five weeks after the outbreak of hostilities. Following Soviet precepts, the North Korean Army lays primary emphasis on the training of officers. Whereas officers for the most part receive formal training at one of several military schools offering specialized artillery courses, enlisted men receive the majority of their artillery training in the field with the units to which they are assigned. Enlisted and unit training, too, fell off sharply in quality as well as quantity with the outbreak of war. By late summer 1950 men were thrown into combat with only a few days training and in many cases without ever having fired an artillery piece. All in all, it appears that while the comparatively well-trained personnel that formed the nucleus of North Korean artillery units prior to the invasion were capable of efficient performance of artillery missions when properly equipped, replacements for the artillery units of North Korean combat divisions recruited under the pressure of heavy war-time manpower requirements, were so inadequately trained as to play havoc with the combat effectiveness of the North Korean artillery arm, which had already been sharply reduced by logistical difficulties and the lack of adequate communications.

2. ARTILLERY TACTICS

A. General

In the employment of field artillery, certain broad unalterable principles apply. These are determined by the intrinsic characteristics of all field artillery which circumscribe its capabilities and cast it in the role of a supporting arm incapable of taking decisive independent action in combat. As a supporting weapon the raison d'être of the field artillery becomes that of rendering assistance by firing direct and general support missions to a combat arm capable of taking independent decisive action. Consequently, the general mission of all field artillery, including that of the North Korean Army, may be resolved into two parts: Firstly, it supports infantry and armored units by fire, neutralizing or destroying those targets which are most dangerous to them; and secondly, it gives depth to combat by counterbattery fire, by fire on hostile reserves, by restricting movement in rear areas, and by disrupting hostile command agencies. Yet, by reason of recurrent and severe shortages of artillery weapons, ammunition and signal equipment, these missions frequently exceeded the limited capabilities of North Korean artillery. The shortages in the case of signal equipment, for instance, are so critical that contact with supported units must at times be maintained by liaison officers who in turn rely on messengers for the transmission of fire mission requests. The artillery commander of the North Korean 13th Division supplied the following illuminating comment on the appalling state of signal communications within his command: "The T/O authorized three radios per firing battery and four per battalion headquarters... The regiment started the war with a full T/O allotment

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

but by 22 August 1950 (the date of the PW's capture) had only four in working condition. There were few trained operators and almost no maintenance." Furthermore, the flow of ammunition to front line troops had been reduced to a mere trickle by the interdictory efforts of UN air power, and from the time of the rout and subsequent reorganization of the North Korean Army, artillery weapons were almost non-existent in the majority of enemy combat units until the spring of 1951. (1)

Apart from logistical factors, the lack of planning and foresight on the part of commanders has also, on some occasions, operated to prevent the proper performance of artillery missions. An excellent illustration of this is contained in the following captured enemy directive, dated 24 August 1950, issued by a regimental commander of the 6th North Korean Division:

"When an infantry unit is advancing toward the enemy front the regimental artillery must provide support. Since this has often been neglected we have suffered huge losses. Worse than this, however, is the fact that the most important infantry weapons, such as heavy machine guns and mortars are often not brought to the front. This proves the inability of commanders to plan battles and organize marches." (2)

In the realm of equipment, too, the North Korean Army has found itself severely handicapped due to the Soviet practice of equipping satellite armies with obsolescent or obsolete weapons. Speaking of the 45mm M-1942 antitank gun, the principal antimechanized weapon of the enemy in KOREA during the early part of the war, the former chief of rear services of the North Korean 5th Division, a senior colonel, states: "This weapon was very ineffective against medium or heavy tanks because of its lightness. Some were used as antiaircraft guns but their slow rate of fire proved them valueless. The North Korean Army was quick to abandon these weapons when retreating." (3)

The cumulative impact of these limiting factors combined with the greatly superior artillery and tactical air strength enjoyed by UN Forces drastically curtailed the use of North Korean artillery. In the past the enemy relied more upon darkness and concealment rather than artillery as a cover under which to maneuver troops. Although major commanders of the enemy have repeatedly instructed their subordinates that daylight attacks are not impossible, they seem to recognize that North Korean tactical operations are subject to serious limitations and combat during daylight hours may prove very costly and hazardous. "Our experience in night combat up to now shows", writes the commander of the North Korean 6th Division in a directive dated 24 August 1950, "that we can operate only four to five hours in the dark, once we start night attacks between 2300 and 2400 hours and, therefore, if the battle continues until dawn we are

- (1) TIS (ADV) 771, 789, 831, 1468, 1488, 2861, 2914, 3130, 3152, 3153, 4010.
(2) ENEMY DOC #4 P/13.
(3) TIS (ADV) 2255.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

likely to suffer losses. From now on use daylight hours for combat preparations and commence the attack soon after sunset. Concentrate your battle actions mostly at night and thereby capture enemy base positions." (4)

The tactical doctrine of the North Korean Army as it applies to artillery appears with minor exceptions, to be a reflection of accepted Soviet artillery tactics. One exception lies in the strength of non-divisional corps, army and GHQ artillery reserves. In the Soviet Union, although the exact figures are not available, artillery controlled by higher echelons amounts to considerably more than 20% of the total. In the North Korean Army, on the other hand, almost all artillery is concentrated within the infantry divisions, where its employment has been dictated by shortages of weapons and equipment, the low mobility of the North Korean Army and the rugged nature of the Korean terrain. (5)

B. Offensive Employment of Artillery

A study of available information indicates that North Korean offensive doctrine, mirroring that of the Soviet Army, calls for rapidity of maneuver of the flanks culminating in a single or double envelopment under cover of the concentrated fire of all supporting weapons. In a combat order dated 24 August 1950 the commanding general of the North Korean 6th Infantry Division gives eloquent expression to this concept: "As I have frequently informed unit commanders regarding the tactics to be used in attacking US troops, it is more advantageous to attack the flanks and rear instead of assaulting the enemy front. Thus, by quick envelopment and occupation of enemy positions a telling blow can be dealt the enemy. In the battle of YABAN-SAN, however, the 1st Battalion of the 15th Infantry Regiment, in spite of the opportunity it had to attack the enemy flanks, assaulted only the enemy front. Consequently, though the enemy position was captured, the operation was exceedingly difficult and resulted in many casualties." (6)

To provide the basis of fire required for the execution of this maneuver, the North Korean enemy seems to have adopted the Soviet groupment technique in the tactical organization of his artillery for combat. Under this system it is the responsibility of the artillery commander, working together with members of the unit operations section, to make a careful estimate of the artillery requirements for each specific operation. Obtaining its general definition from the commander's tactical plan of maneuver, this estimate is based on an analysis of UN capabilities, as reflected by available intelligence information, and a personal on-the-spot reconnaissance which the artillery officer makes together with the division commander. In accordance with this study, all available artillery, including that organic to subordinate units, may be formed into groupments tailored

(4) ENEMY DOC #4 P/13.

(5) TIS (ADV) 771; KT 0900; ENEMY DOC #4 P/18.

(6) ENEMY DOC #4 P/13.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

to meet the requirements of each phase of the projected operation. Self-propelled guns, antitank guns and even the mortars of the infantry regiments and battalions may become a part of an artillery groupment. If the division is to make the main effort, artillery from other divisions may also be attached and included in these teams. The use of the artillery of neighboring divisions compensates in part for the scarcity of artillery at corps and higher levels. For purposes of tactical control over these groupments and to facilitate planning, each attack operation is divided into three phases: preparatory fire, assault support fire and fire during the period of penetration and consolidation. Depending on the phase of the operation, amount of artillery available, the nature of the terrain and scheme of maneuver, artillery groupments may be held in general support, be assigned a direct support mission or be attached to a subordinated unit. Except during the preparatory fire phase, very little artillery is held in general support. For example, in the initial communist invasion across the 38th Parallel the 4th Infantry Division, according to a field order dated 22 June 1950, held only the attached corps artillery battalion in general support during the assault and penetration phases. During the period of preparatory fire, however, normal employment seems to call for the assignment of the bulk of artillery to general support missions. The centralization of control, indispensable to the effective application of preparatory fire, is assured by assigning in the unit operations plan, specific fire missions to all artillery groupments, even to and including those initially attached to subordinate units. With the crossing of a predetermined phase line during the assault, the control of the majority of these units is decentralized and they are assigned fire missions of direct assistance to subordinate combat teams. This passing of control, from centralized during the preparatory fire phase to decentralized during the assault and penetration, is particularly necessary in the North Korean Army due to the shortage of signal equipment, which precludes efficient control of all supporting artillery through a central staff. The amount of artillery to be assigned to subordinate units varies with the plan of maneuver. While it is customary for the enemy to concentrate his fire power in the sector of the main effort, as a rule of thumb he uses a ratio of one artillery battalion to a regiment of infantry and an artillery battery to an infantry battalion. (7)

Generally speaking, the objective of preparatory fire, according to North Korean tactical concepts, are to break up the enemy command and observation system, to neutralize hostile supporting weapons, to open gaps through hostile defenses and to soften up the opponent's defending forces. These functions are detailed in a captured enemy field order, issued by the 4th Infantry Division on 22 June 1950, as follows:

"The general function of artillery during the time of preparation for attack is:

- (7) TIS (ADV) 771, 780, 1271, 3183; KT 0638; ENEMY DOC #4 P/17, #5 P/48, 200118, 201033; CURRENT TRANS #3 P/1.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

"a. To cripple and destroy the enemy's fighting power on his defense line.

"b. To break down the enemy's artillery positions, engineer fire positions as well as permanent fire positions.

"c. To construct a path through obstacles on the enemy's defense line.

"d. To hold off the enemy from the line CHOMBANG* through PUJOPTONG* to CH'OGH'ON-NI*.

"e. To prevent the enemy's observation from posts on the defense lines."

To achieve the desired results, the field order prescribed that "artillery preparatory fire will be laid down for 30 minutes--15 minutes bombardment and 15 minutes rapid fire". Although North Korean artillery doctrine dictates that preparatory firing be continued until the senior commander is satisfied that the desired effect has been achieved, practical logistical considerations apparently have operated to thwart any lavish expenditures of ammunition. One informant speaks of an artillery preparation of two hours duration; but all other sources agree that approximately 30 minutes of preparation is normal and at times preparatory fires of only 10 minutes' duration have been employed. Another standard procedure in the North Korean Army is the practice of opening the artillery preparation by directing a sudden intense concentration of available fire power at the UN main line of resistance and at known firing positions within that line. This concentration may last from 5 to 15 minutes. During this time, the target area is saturated with 20 to 24 rounds of artillery ammunition per 1,000 sq ft. This may be followed by a period of systematic observed fire for the purpose of destroying firing positions and personnel targets revealed during the initial concentration. During the period of preparatory fire, North Korean artillery doctrine considers it proper to execute one or more false transfers of fire in order to deceive the opponent as to the actual time of assault and to inflict a maximum number of casualties. A final intense concentration of artillery fire, accompanied by fire from automatic infantry weapons, sometimes precedes the actual assault. The technique of delivering preparatory fire as outlined above is illustrated, with the exception of a false transfer, in a captured combat order issued by the North Korean 9th Infantry Division on 28 August 1950:

"For best effect, the 23-minute artillery preparatory fire shall be carried out as follows: bombardment for 5 minutes; regular firing for 15 minutes; bombardment for 3 minutes. During the final bombardment, especially, concentrated and simultaneous fire shall be employed together with the infantry's heavy machine guns and antiaircraft machine guns." (8)

(8) TIS (ADV) 771, 1242, 1607, 1790; ENEMY DOC #4 P/18, #15 P/62, 200118; CURRENT TRANS #3 P/2.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

For the application of preparatory fire, artillery pieces are emplaced secretly, under cover of darkness, in well-camouflaged, forward positions. In the case of flat-trajectory weapons direct laying is employed wherever possible and a firing position situated from 500 to 1,000 yd from UN lines is considered ideal. Normal targets for these weapons are personnel, tanks, infantry weapons, obstacles and light field fortifications. The 82mm and 120mm mortars, which the North Korean Army classifies as artillery and employs in an artillery role, are normally emplaced in defilade positions and used to attack personnel and infantry weapons in the UN main line of resistance by means of observed fire. Corps artillery, identified as such only in captured enemy combat orders but presumed, on the basis of identifications scattered through PW interrogation reports, to be the Soviet 122mm gun or gun-howitzer, is employed during the preparatory fire phase in a general support mission to deliver counterbattery fire, interdict supply lines in the UN rear and deny potential avenues of retreat. (9)

Under cover of the preparatory fire the assault echelon advances to and occupies the assault line, which is established as close to the UN front as is consistent with the nature of the terrain and safety from the enemy's own artillery (usually 200 to 250 yd). With the start of the assault, the general and direct support artillery transfer their fires to appropriate targets in the depth and on the flanks of the UN position. This transfer of fire, which introduces the assault support phase of the artillery operation, is executed either at the signal of the division commander or automatically as directed by the unit operations plan. In general, the mission of artillery during the assault consists in the continued neutralization of UN fire power, engagement of reserves to prevent counterattacks, isolation of the UN defenders from reinforcement and supply, denial of withdrawal routes and continued support of North Korean infantry and armor attack formations as the breakthrough gains depth and momentum. Targets of opportunity impeding the progress of the assault are engaged by 45mm and 76mm weapons organic or attached to infantry regiments and battalions. These guns neutralize their targets by direct laying from the flanks and through the intervals between platoons. Particular attention is paid to the neutralization of enemy firing positions discovered on the flanks. (10)

The occupation of the opponent's first line of defense signals the forward displacement of direct support artillery. Before the engagement opens, the infantry commander indicates to all supporting units the sequence of displacement and priority of passage over cleared routes of advance. Artillery displaces by echelon in a leap-frogging manner; approximately two-thirds of the artillery pieces remain in firing positions, while the other third are on the move. In the course of this forward displacement, artillery units as a rule become directly attached to one of the assault regiments. Nevertheless, the enemy retains a degree of flexibility even in the

(9) TIS (ADV) 771, 1093, 1242, 1595, 1607, 1611, 1790; ENEMY DOC #4 P/18, #15 P/62, 200118; CURRENT TRANS #3 P/2.

(10) ENEMY DOC #4 P/18 200117, 200118.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

control of artillery directly attached to supported units, and at any stage of the operation, the senior commander may recapture control of artillery that has been so attached. Fire power, according to North Korean offensive doctrine, may be reassigned even during the course of an attack and commanders are enjoined to exploit the local success of any unit with the full weight of all available weapons. (11)

Once a significant penetration through hostile defenses has been effected, it becomes the primary mission of artillery to engage the opponent's reserves, prevent counterattacks and isolate the battlefield by cutting the routes of reinforcement, supply and withdrawal of the defending forces. The duties of that section of the artillery retained under centralized control are exemplified by the following excerpt from a combat order issued by the North Korean 9th Infantry Division on 28 August 1950:

"During the period of battle in the penetration area, the division artillery shall protect the infantry's advance, gradually shift to concentrated fire, destroy enemy concentration areas and interdict enemy rear mobilization roads and counterattacks by employing the standing barrage method of fire. Employing corps artillery it shall destroy the enemy artillery emplacements, cut off the enemy withdrawal routes, neutralize enemy reserve areas, and prevent counterattacks of the enemy reserve." (12)

Initially, offensive artillery tactics of the North Korean Army were geared to combat with an opponent inferior in fire power, armor and air support. However, with the entry of UN Forces into the Korean conflict, the enemy sustained crippling personnel and materiel losses--particularly in his armor and heavier supporting weapons--at the hands of a superior UN air and artillery arm and was forced to restrict his combat operations primarily to the hours of darkness. As a consequence, the North Korean Army acquired considerable proficiency in night tactics and evolved a revised operational doctrine based on expediency and experience on the field of battle. According to these modified tactical concepts, successful night attacks depend upon simplicity of maneuver, detailed preparations and surprise. The commanding officer, on the basis of a reconnaissance made during hours of daylight, establishes the line of departure, assault line and mission for each subordinate unit. Artillery concentrations are prepared in advance to neutralize personnel, destroy firing positions and neutralize or breach hostile defenses in the sector of the attack. Adjustment of fire on selected targets is conducted during daylight hours prior to the attack. Preparatory fires are often omitted in order that the element of surprise may be maintained. In this case the artillery goes into action automatically when the advancing infantry draws hostile fire. Organic or attached 82mm mortars, 45mm antitank guns and 12.7mm antiaircraft machine guns advance with and on the flanks of the

- (11) ENEMY DOC #4 P/18, 200118.
(12) ENEMY DOC #4 P/18, 200118.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

infantry battalion, firing on targets designated by the infantry commander. In addition, up to a battalion of division artillery may be attached to an infantry battalion in a night attack operation. This is particularly true where, as in the case of the 25th Infantry Regiment, 10th Division, in its night assault on the NAKTONG River line, a deep penetration at the flank was contemplated to cut the defending unit's avenue of withdrawal. When the attack is successful, the objective is immediately organized for defense and artillery displaces forward. In the event the initial assault is repulsed, North Korean tactical doctrine calls for an immediate reorganization and an attack against the same sector preceded by an intense artillery preparation, although field reports indicate that enemy units seldom had the necessary staying power, combat efficiency or resupply potential to mount several successive assaults on the same objective. (13)

C. Defensive Employment of Artillery

Based on the assumption that no active aid from outside sources would be forthcoming for their intended victim, North Korean military leaders probably anticipated that once the core of initial resistance had been penetrated the drive to the southern coast would be virtually unopposed. As a result of this erroneous strategic estimate, the pre-war training program of the North Korean Army stressed the offensive phase of combat to the virtual exclusion of defensive preparations. Hence, North Korean combat forces were quite unprepared to assume the defensive posture eventually forced upon them by UN troops. This lack of training and the laxity produced among some North Korean troops by the prosecution, until early September 1950, of an essentially offensive type of warfare is graphically illustrated by the following directive published on 24 August 1950 by the 6th North Korean Division: "As soon as a unit arrives at its objective it must be strengthened immediately and engineering works completed in order to prevent damage and casualties from enemy shelling and bombing. This practice must be thoroughly indoctrinated in all troops and commanders. More than 8% of those wounded in previous battles were hit by shrapnel. This proves that our engineering duty was neglected. Now one rarely sees an engineer shovel which all troops should have in their possession at all times. Such conditions not only encourage careless handling of equipment but will result in needless sacrifice of valuable troops. In future battles unit commanders will be held responsible for any losses due to the neglect of engineering works." However, by falling back upon what appears to be an adaptation of the battle-tested defensive doctrine of the USSR, coupled with such passive defense measures as night movement and camouflage, the North Korean enemy has been able to preserve a modicum of organization and tactical efficiency even in the face of severe military reverses. (14)

Positional defense, according to North Korean defensive doctrine, is a form of combat whereby a military force, making advantageous use of favorable terrain and

(13) TIS (ADV) 1790; ENEMY DOC #200117, 200118; ATIS BULLETIN #13 P/2.

(14) TIS (ADV) 3905; ENEMY DOC #4 P/13.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

available equipment, firmly holds a position with the minimum of troops and material and inflicts heavy losses on a superior opponent. But in deference to the offensive inclination of Soviet-inspired armies, North Korean military leaders hold that only an all-out counterattack can secure eventual success in defensive combat. In applying these concepts the enemy works on the theory that strength in a defensive situation requires endurance on the part of the troops, coordination of fire power, organization of antitank and antipersonnel obstacles, decisive counterattacks and skillful utilization of the terrain. The preparation of an adequate defense plan is a command function at all echelons. Laxity in the formulation of such plans is considered a serious military offense punishable by death, as revealed by the following order, which was promulgated by the North Korean Army High Command in August 1950" --- Officers who did not formulate a suitable counterdefense plan for their subordinate units and troops will be executed as criminals by a firing squad before officers of their own unit."

Due to chronic shortages in communication facilities, effective coordination of fire power has been most difficult of attainment in the North Korean Army. In an offensive situation, as was brought out previously, this handicap can be offset to some degree by detailed prior planning. In a defensive posture, however, where the initiative lies with the opponent, adequate means of rapid communication become essential to centralized command. Thus, the lack of signal equipment was probably an important factor in motivating the North Korean Army to adopt the Soviet concept of decentralized defense. Under this system, the positional defensive area is composed of a number of self-sufficient islands of resistance capable of all-around defense even when completely isolated from neighboring forces. The bulk of artillery and other supporting weapons are attached to these strong-points and, except for certain preconceived missions concerned primarily with coordinated fire on the final protective line, operate under decentralized control. In this type of positional defense, artillery and other supporting weapons have the following missions: to support the displacement of troops stationed in the security line, to harass hostile assembly areas, to engage hostile assault formations and their supporting armor, to fire on the final protective line and to support counterattacks. An apparently recent innovation, outlined in a captured North Korean document titled "Assault Team Tactics" and published in 1951, is the practice of using artillery at night to distract the attention of friendly forces and allow special ranger teams of the enemy to infiltrate through UN lines and disrupt important military targets in rear areas. Decentralization is apparent in all phases of the North Korean defensive pattern. The artillery battery, for instance, is the normal firing unit, although there have been occasions when the massed fire of an entire battalion has been used; however, that has been the exception rather than the rule. (15)

(15) TIS (ADV) 771, 789, 1790, 3183; ENEMY DOC #8 P/19, #14 P/8, #15 P/1, 2, 5, 11, 12, #48 P/90.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

In establishing a defensive position, North Korean military doctrine prescribes that a command reconnaissance be conducted jointly by division, regimental and battalion commanders together with the division artillery officer and commanders of other supporting weapons. This reconnaissance is aimed at deciding on the most suitable location for the outpost line, security line and main line of resistance, assigning regimental sectors of responsibility and selecting areas to be mined or otherwise neutralized by obstacles. Based on the decision of the division commander resulting from this command reconnaissance, the artillery officer drafts an over-all fire plan for the division. This plan makes provisions for the support of the security line, counter-battery fire, fire on the final protective line and the support of counterattacks. Normally the bulk of the division artillery is attached at a ratio of one artillery battalion to an infantry regiment. Simple signals, both oral and visual, are adopted to call down fire on the final protective line. In addition to preparing the fire plan as an annex to the division defense order, the artillery officer also participates in the formulation of antitank defense plans for the division, since North Korean artillery plays a vital role in the defense against hostile mechanized attacks. In the event of such an attack, the enemy attempts to channelize hostile tanks into preregistered concentrations of antitank and artillery fire by means of obstacles and mine fields and employs his field artillery to separate tanks from the accompanying infantry for piecemeal annihilation. (16)

When a division sets up an over-all defense, fire support for the security line is furnished, in accordance with the fire plan, by artillery located in the main defense zone and by mortars which may for that purpose be emplaced in alternate positions in front of the main line of resistance. The fire of artillery and other supporting weapons is so planned that it covers the entire front of the security line and obstacles forming a part of that line. The security line is designed to eliminate surprise attacks, hinder hostile reconnaissance and prevent opposing forces from learning the true location of the main defensive belt. In furtherance of this design of deception, North Korean defensive doctrine calls for the construction of a dummy front line complete with false artillery and tank emplacements. Actually, however, there is little evidence to suggest that in the field the enemy had the time, supplies and inclination to construct elaborate systems of dummy fortifications except in isolated instances, although one interrogee reports that in the 1st Division of the North Korean III Corps, a platoon of engineers is attached to each regiment to supervise the setting up of dummy tanks and artillery for the purpose of confusing UN Forces and causing UN tactical aircraft to expend their missiles fruitlessly. (17)

The main line of resistance has a depth of 3 to 4 miles and is divided into regimental and battalion sectors; the latter in turn consist of a number of strong-

(16) ENEMY DOC #13 P/7, #14 P/8, #15 P/3, 5; ENEMY DOC SUPPL #5 P/93.

(17) TIS (ADV) 5029; ENEMY DOC #13 P/19, #15 P/2.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

points with fortifications and obstacles affording all-around defense, even when cut off and isolated. In consonance with the division fire plan, regimental and lower commanders assign fire missions to all organic and attached supporting weapons. Regimental artillery is, to a large extent, attached to the battalions. Weapons are assigned sectors of responsibility in such a manner as to assure fire coverage of the entire front. Special care is devoted to adequate fire protection of intermediate zones between individual strong-points. In this connection, it is the duty of the division commander to designate to the artillery commander the area occupied by combat security troops, their paths of retreat, the extent of the unit front, sub-unit areas and duties of supporting weapons. The emplacement of artillery varies with the situation and the terrain; but generally speaking weapons are deployed in depth to assure that any penetration of the defense zone can at once be brought under concerted artillery fire. Whenever possible, sites secure from mechanized attack and affording good fields of fire to the flanks and to sectors of probable armored penetration are selected. Artillery pieces are emplaced secretly, usually at night, and are camouflaged to prevent premature detection by opposing forces. Once a firing position is discovered, it is abandoned and an alternate site occupied. Concentrations of high-trajectory fire are registered on all depressions along the front and flanks that cannot be covered satisfactorily by fire from automatic weapons. All weapons, of course, are zeroed in on the final protective line, which usually parallels the front at a distance of 200 to 450 yd. In order to assure a coordinated defense, each battalion commander is required to draft a sketch of his battalion area for submission to the regimental commander, indicating the company sectors, firing positions, the battalion fire plan and plan for counterattack.

(18)

The initial shock of an attack against a typical North Korean defensive system is absorbed by the security line. Since it is one of the functions of the security line to conceal the true location of the main line of resistance, fire missions in support of the troops occupying this line are delivered from alternate rather than primary firing positions within the main line of resistance and weapons not assigned a security support mission are kept well concealed. When the pressure becomes too strong, the security forces under the cover of supporting weapons fall back on the main line of resistance. Thereupon, the North Korean enemy unlimbers his hitherto concealed fire power. Commanders are cautioned against prematurely revealing the location and strength of artillery support and maximum fire power is not ordinarily employed until the opponent has advanced to within approximately 450 yd of the front. To effect surprise and produce shock, North Korean defensive doctrine recommends that supporting fires be concentrated and delivered simultaneously by all weapons upon a prearranged signal by the division commander. When UN Forces succeed in occupying a portion of the main

(18) TIS (ADV) 771, 789, 1790, 3183; ENEMY DOC #13
P/7, 8, 22; #14 P/5, 6, 8, 10, #15 P/2, 5, 11, 12.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

defensive system, enemy tactics prescribe that all available fire will be focused on the threatened sector. At the same time a determined counterattack is to be mounted against the flanks of the penetrating force. Tactics employed in the counterattack parallel those that have already been discussed in the preceding section on the offensive employment of artillery. (19)

When the tactical situation and a greatly superior opponent preclude the establishment of a positional defense, North Korean military doctrine calls for delaying action in successive positions to trade space for time and to inflict the maximum possible personnel and material losses on the attacker. In his military terminology, the enemy refers to this type of action as mobile defense. In executing this maneuver, each unit occupies two lines of defense simultaneously but concentrates the bulk of its strength on the forward position. The distance between regimental lines is such that the attacker, having occupied the one, must displace his artillery before he can assault the rear position. Part of the artillery is employed under decentralized control by attaching it to units in the forward position, while the remainder is concentrated in the rear and fires under control of the senior commander. Weapons are emplaced to permit engagement of the attacker at maximum ranges in order to force him to deploy his forces and make time-consuming preparations for an assault. In order further to harass and delay the opponent, ambushes and obstacles are prepared and covered by fire from supporting weapons. Before elements in forward positions can be pinned down by hostile fire, they withdraw along previously selected routes offering cover and concealment. The withdrawal is accompanied by small-scale diversionary counterattacks and is covered by the fire of all supporting weapons. Artillery units attached to the displacing elements retreat by echelon, using a leapfrog-like maneuver which permits continuous support by at least two-thirds of the normal fire power. In the event forward units find it impossible to disengage, a determined counterattack directed at the flanks of the attacker is mounted under the direction of the senior commander and supported by all available weapons. But because of absolute UN air superiority and acute shortages of heavier weapons and ammunition, the enemy prefers to effect the withdrawal of his forward elements en masse after dark and under the cover of specially-organized security detachments capable of delivering heavy volumes of automatic weapon fire. (20)

Although an operation of a specialized character, the defense of a mountainous sector is accorded considerable stress by the North Korean Army because of the rugged nature of the Korean topography. In this type of defense, enemy doctrine calls for the organization in depth of key heights in such a manner as to afford all-around protection and at the same time permit the effective control of low ground by fire power. Flat trajectory artillery is emplaced near the military crest so as to minimize dead space and to allow enfilade fire and barrages to be laid on the approaches and draws leading to the defense position. Intermediate areas between strong-points and

(19) ENEMY DOC #13 P/12, 13, #14 P/9, 10, #15 P/2, 5, 9.
(20) ENEMY DOC #14 P/24, 25, #15 P/14, 15, 16, 17.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

approaches to surrounding high ground are secured by obstacles and fire from supporting weapons. Mortars and artillery capable of high-angle fire are emplaced on the reverse slope and made responsible for fire into adjacent areas and dead spaces. Since hilly terrain enhances the normal communication difficulties of the enemy and restricts fields of fire and observation, command of artillery in mountain warfare is decentralized. Sectors of responsibility are assigned by the senior commander, however, and boundaries are designated that do not coincide with roads or draws, for North Korean military doctrine specifies that such terrain features must be controlled by fire under a unified command and should not be jeopardized by a division of responsibility. (21)

D. Artillery Marches

Due to complete UN air superiority, movement of troops and equipment, by whatever method utilized, is normally accomplished under cover of darkness. Indications are that whenever the tactical situation permits, the march is by units of division strength with control centralized and planning executed by the operations section of division headquarters. Upon approach to the area of combat, however, or when air attacks are anticipated, dispersion is considered necessary and movement may be made by units of regimental or battalion strength. There is reason to believe that the artillery regiment, due to its heavy equipment, moves independently of the main body when traversing difficult terrain, since infantry units tend to avoid main roads and travel over trails and mountainous country to avoid detection by UN Forces. With the possible exception of the 76mm pack howitzers of the infantry regiment, such terrain is not suitable for the movement of artillery. A captain in the artillery regiment of the 47th Division describes the normal march order of his division as follows: "During the day we never moved in groups of regimental or division strength. At most one platoon operated on liaison duty. At night the entire division moved, with the distance between regiments varying from 1 1/2 to 2 1/2 miles. The order of march was 1st, 2d and 3d infantry regiments followed by the artillery regiment." The ammunition train, if horse drawn, marches from 1 to 2 1/2 miles to the rear of the unit; if motorized, a distance of 5 miles is maintained. (22)

The artillery regiment of North Korean infantry divisions was originally equipped to move by organic motor transportation; but due to battle losses and lack of replacements very few trucks are available at present. Consequently, when on the move, artillery is generally drawn by horses or oxen and one PW even states that in his unit the 45mm antitank guns were moved by manpower. Normally, when trucks are available, they travel under blackout conditions to avoid detection by UN aircraft; but headlights shaded with a dark cloth are frequently switched on in traversing a particularly difficult stretch of road. Although lookouts are sometimes posted along important roads to warn of the approach of

(21) ENEMY DOC. #14 P/22, #15 P/27, 28, 29.

(22) TIS (ADV) 235; ATIS BULLETIN #18 P/1; AUFERG 2B-N-5, 15, 27, 56, 64, 69, 70, 74, 35, 97.

~~SECRET SECURITY INFORMATION~~

~~SECRET-SECURITY INFORMATION~~
UNCLASSIFIED

UN aircraft, most enemy prisoners state that there is no special antiaircraft warning system for units on the march; anyone who sees or hears planes simply shouts "planes" or "air raid" or fires his weapon. Marching troops apparently are little concerned with night-flying hostile aircraft. "At night while marching", states a typical PW, "even if the enemy planes flew over us we continued marching. The officer merely warned us: 'Be-ware of airplanes' ". But vehicular traffic stops when an air alert is sounded and crews take shelter on either side of the road. (23)

Although UN damage to roads and bridges has im-peded the movement of North Korean artillery, the enemy, by utilizing effective though simple methods of road re-pair and stream crossing, eventually has been able to move his supporting weapons forward. The 13th Division artillery officer, for instance, describes the first crossing of the NAKTONG River as follows: "At NAKTONG-NI (36°22'N-128°18'E) the artillery regiment was ferried across the NAKTONG River on ponton rafts measuring 2 by 7 by 3½ meters. These rafts were hauled to the river area on trucks from the II Corps Headquarters by an engineer unit of 30 men. The individual wooden pontons used mea-sured 5 by 1½ meters and five pontons formed one raft having a total capacity of one fully-loaded 10-wheeled truck, one 76mm M-1942 gun or 122mm M-1938 howitzer, and 10 to 15 troops. These barges were propelled by oars and it took five hours for two barges to transport one artill-ery battalion across the 200-meter wide river." (24)

On the basis of information obtained from recon-naissance elements, the enemy selects bivouac areas for his artillery affording natural cover and concealment. Locations at the foot of mountains, away from large vil-lages but in an area of scattered houses, are preferred. During temporary halts on a road march, vehicles and wea-pons are camouflaged and concealed as well as the situa-tion permits. They are preferably parked under natural cover such as a grove of trees, a cave, village houses or at the foot of an incline. If such natural cover is not available, potential targets are camouflaged by means of fresh vegetation, hay or prepared and improvised camou-flage nets. During winter, vehicles and guns are either painted white or covered with white cloth. Horses and other draft animals are completely blanketed in white ex-cept for eyeholes. During stop-overs in camps, sentries equipped with field glasses are posted on commanding ground as aircraft look-outs. Upon the approach of hos-tile planes they sound an air alert by shouting, blowing a whistle or firing their weapons. (25)

E. Selection and Organization of Firing Positions

Artillery positions are selected in accordance with the dictates of the prevailing tactical situation, the artillery mission and the trajectory and range of the weapon to be emplaced. As pointed out in preceding para-

- (23) TIS (ADV) 1271, 1405, 3783, 5039; AUFERG 2B-N-37, 42, 70, 75, 85, 92; AUFERG RPT #3.
- (24) TIS (ADV) 235, 771, 1161, 1242.
- (25) TIS (ADV) 3905; AUFERG 2B-N-5, 14, 24, 32, 40, 74, 75, 79, 81, 92; AUFERG RPT #3.

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

graphs, artillery sites in an offensive situation are selected well forward to facilitate exploitation of a breakthrough. When, on the other hand, a defensive posture is assumed by the North Korean Army, artillery is echeloned in depth to afford fire cover throughout the defense zone. In either situation it appears that appropriate areas for emplacing supporting weapons generally are designated by the infantry commander at each level for organic and attached artillery on the basis of information acquired during the course of the command reconnaissance; in the case of the division artillery, areas are selected upon reconnaissance data supplied by the reconnaissance and survey platoon. As a rule of thumb, North Korean artillery doctrine provides that the firing positions of artillery groupments (normally of battalion strength) in support of an infantry regiment shall be within 2,000 to 2,500 yd of the infantry front. An artillery regiment, if employed as a unit, occupies an area from 1,000 to 1,500 yd in width and from 3,000 to 5,500 yd in depth. Selection of the exact firing position for each weapon within the general area designated by the infantry commander seems to be left to the discretion of the commanding officer of each supporting artillery battery; however, the emplacement of antitank guns proceeds under the personal direction of infantry battalion commanders. In general, the firing positions of all supporting weapons, antitank guns as well as field artillery, are so chosen that the field of fire covers all normal targets and all potential avenues of mechanized attack within the assigned sector of responsibility. Wherever possible, artillery is emplaced in areas inaccessible to tanks and offering natural cover and concealment from hostile air and ground observation. When tactical requirements permit, guns are emplaced in defilade behind hills or at the edge of a wooded area. In villages and towns, sites in or near bombed out buildings are preferred. If the tactical situation so dictates, antitank guns may even be set up on an open road; but whenever possible sites are selected on small wooded hills offering concealment and at the same time an all-around field of observation and fire. Mortars are usually emplaced at the base of a reverse slope. For additional details on antitank gun and mortar positions and the conduct of fire with these weapons, reference should be made to the research study titled "North Korean Defensive Tactics" published in ATIS Research Supplement, Interrogation Reports, Issue No. 96, dated 28 February 1951. (26)

North Korean artillery units as a rule occupy firing positions at night or during periods of low visibility. Reconnaissance and combat security personnel are detailed by the division commander to guide the command into position. According to PW information quoted in G-2, GHQ, Intelligence Summary No. 3141, dated 16 April 1951, guns are normally deployed by battery with the intent of concentrating one battalion in the same general area. When terrain features permit, artillery batteries are usually emplaced in a line formation

(26) TIS (ADV) 771, 789, 1190, 1420, 3005, 3183, 3778, 3779, 3905; ENEMY DOC #14 P/2, 3, 6, 11, #15 P/3, 4, 7; ENEMY DOC SUPPL #5 P/67.

UNCLASSIFIED

20

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

with intervals of 30 yd between 76mm guns and 50 yd between 122mm artillery pieces. One artillery officer, the commander of the 13th Division Artillery Regiment, states that at times, however, a flat W-formation is employed. In defensive situations guns are dug in to a depth of 3 or 4 ft with the excavated earth banked to the front. Although some sources indicate that when time permits log-and-earth-covered sloping pits 6 or 7 ft deep are constructed on either side of the main emplacement to provide protection for the crew, ammunition and gun, the majority of prisoners report that shelters are constructed only for personnel and ammunition, while the guns, which in any event are well camouflaged or concealed, are left unattended during UN air attacks. It may be of interest, however, to note that the North Korean Army in its list of engineer priorities subordinates the construction of personnel shelters and trenches to the establishment, fortification and concealment of command and observation posts. Each firing battery constructs a command observation post in front of the gun positions on ground affording the best available view of the target area. In addition, each battery normally mans two forward observation posts which, if terrain features permit, are located within 30 to 50 yd of the command observation post and about the same distance from one another. If warranted by the tactical situation, flank and auxiliary observation posts may also be selected. Furthermore, it is practice with artillery units of the enemy to displace pieces at least once a day to alternate firing positions which are reconnoitered in advance but not prepared until occupation. As a further means of deceiving UN aircraft and reconnaissance patrols, North Korean military doctrine prescribes (and corps artillery sections have long insisted on) the construction of dummy firing positions when time permits. In the past, field commanders apparently have found it impractical to comply with these regulations; but two recently-captured prisoners indicate that these directives are currently being followed to some extent at least and that a platoon of engineers is attached to each artillery regiment to supervise the setting up of decoy tanks and artillery pieces. (27)

Also advocated by North Korean doctrine, but according to PSW not normally followed in the field, is the practice of assigning infantry detachments to the artillery to provide security for firing positions. Armed primarily with carbines, the gun crews themselves are actually held responsible for the security of the battery area. The only exception to this practice occurs in 122mm howitzer batteries; during night firing five or six men from the regimental security platoon, armed with submachine guns, are normally attached to these batteries as security guards. In addition, four antitank rifles form part of the organic equipment of the 122mm howitzer battery. Two of these weapons are generally emplaced at a distance of about 35 yd from the battery position along the main route of approach to the guns while the remaining two antitank rifles are employed to cover the flanks. (28)

- (27) TIS (ADV) 771, 789, 1271, 1820, 3008, 3183, 5029, 5039; KT 0313; ENEMY DOC #14 P/2, #15 P/7; ENEMY DOC SUPPL #5 P/56, 65, 69.
(28) TIS (ADV) 5039; ENEMY DOC #6 P/75, #14 P/11.

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

Defensive measures designed to protect North Korean artillery from UN air and artillery strikes are primarily of a passive character. Of these measures, which include field fortifications, concealment, deception and camouflage, the latter has perhaps played the leading role. Complete UN air superiority has compelled the enemy to develop considerable skill at camouflaging military targets. "Camouflage", says a former battalion commander of the 6th Division Artillery Regiment in stressing the importance of concealment from air and ground observation, "is the first consideration of the gun crew upon occupying a position." Simple, indigenous materials such as straw, twigs, trees, grass and earth are utilized either alone or as garnishing for camouflage nets which measure 40 by 40 ft and are sometimes issued on a basis of two per artillery piece. Where available, such nets are stretched between trees, so as to cover the entire gun emplacement. Personnel shelters for the crew are camouflaged with straw and vegetation. In addition, crew members devise their own camouflage nets to be attached to their hats and jackets. During winter months reversible (white on one side and brown on the other) parkas are issued to the troops and each organization is furnished with a length of white cloth that may be cut up into camouflage sheets for horses, guns and vehicles. (29)

F. Ammunition Supply

The battery ammunition supply point is usually established in camouflaged dugouts 2 to 3 km to the rear of the firing positions. Although the unit of fire for 76mm weapons is 140 rounds and that for the 122mm howitzers amounts to 80 rounds per piece, only a fraction of that amount (20 to 25 rounds for the 76mm and 10 to 15 rounds in the case of the 122mm weapons) is kept at the gun position. In keeping with the logistical doctrine of the North Korean Army which holds that the impetus of supply must be from higher to lower echelon, the resupply of ammunition is a function of the divisional artillery rear service organization and whenever the tactical situation and the terrain permit, vehicles of the regimental ammunition platoon transport ammunition directly to the gun positions. Prime movers are apparently not utilized in the resupply effort, but are kept in concealment 4 or 5 km to the rear of the gun emplacements. When vehicles are not available or when their use is deemed impracticable or impossible, horse or ox-drawn carts, combat troops and civilians are pressed into service as ammunition carriers. For the most part, resupply is accomplished at night; but some reports indicate that human bearers moving in small groups to avoid detection have successfully performed their mission in broad daylight. An additional and rather unique method of bringing ammunition forward is related by one PW, who states that on three different occasions he saw replacements come into his organization without individual weapons but loaded down with ammunition. (30)

- (29) TIS (ADV) 771, 1093, 1607, 3183, 3779, 3780, 3781, 3905, 5039.
(30) TIS (ADV) 771, 954, 995, 1087, 1154, 1237, 1242, 1271, 3008, 3183, 5039.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

While resupply within the operational area of the divisional artillery has presented no insoluble problem to the North Korean Army due to the short distances involved, quite the opposite is true in rear echelons. Constant air and naval strikes against the enemy's over-extended lines of communication have drastically reduced the flow of ammunition and of most other material. The resultant shortages have elicited the following very typical comment from the captured chief of staff of 13th Division: "Since shipment of supplies has become almost impossible during daylight hours, the supply of ammunition, especially of artillery shells, has been almost completely depleted. On 21 September 1950 the artillery officer had to bury some of his pieces for lack of ammunition." An officer PW from the 4th Division Artillery Regiment paints an equally grim picture: "At the time of my capture (19 August 1950) there were about two rounds of ammunition per gun for use in emergencies only." Indeed, most North Korean divisions were obliged to conserve ammunition by limiting the application of all types of artillery fire. In the 13th Division, for instance, the division commander imposed firing restrictions which limited the artillery to 10 or 15 rounds of ammunition per gun per day. In previously planned attack situations where there has been an opportunity to stockpile Class V supplies, the division combat order normally specifies the quantity of ammunition to be expended on the initial and succeeding days of combat. Thus, a field order issued by the North Korean 9th Division prior to its assault on the NAKTONG River Line in August 1950 provided for the expenditure of 60% of a unit of fire during the first day of combat and 20% during the second and succeeding days. An additional 20% of a unit of fire was to be reserved for the defense of the captured perimeter. All in all, the inability of the North Korean enemy to cope successfully with the logistical difficulties resulting from UN interdiction of his supply lines has imposed severe limitations on the employment of his artillery arm. (31)

The inferior quality and age of the artillery ammunition which the USSR initially furnished to the North Korean Army further complicated the logistical problems of the enemy. One North Korean officer, a lieutenant colonel, estimates from the verdegis deposit found on the shell casings that most of the ammunition received by his organization was four or five years old. A senior colonel of the North Korean 5th Division further states that his unit experienced many misfires and duds in firing Soviet ammunition. During the first few months of the war (until about October 1950) the North Korean Army employed only two types of ammunition, namely HE (high explosive) and AP (armor piercing). In conjunction with these rounds the Soviet KTM-1 point-detonating fuze, to which a nose cap may be affixed for a slightly delayed burst, was used almost exclusively. In September or October 1950 HE fragmentation, HEAT (high explosive anti-tank) and possibly 76mm shrapnel-type ammunition became available to the North Korean puppet army. The latter is described in an enemy document as having a maximum effective burst pattern that is elliptical in shape and

(31) TIS (ADV) 771, 789, 1468, 2861; ENEMY DOC #4 P/18.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

measures approximately 500 to 800 ft in length and 65 to 100 ft in width. In addition, captured enemy document sources provide some evidence, in the form of illustrated charts, that the North Korean Army contemplated the use of 76mm smoke and incendiary shells and 122mm flare shells. It also appears that mechanical time fuzes have been furnished the enemy; but further details are lacking. For all types of ammunition up to a caliber of 76mm, the charge is fixed. On the other hand, 122mm howitzers take a semi-fixed round which may be fired with up to five additional increments. The 45mm anti-tank gun may fire AP (armor piercing) as well as HE (high explosive) rounds fitted with the KTM-1 fuze described above. Although captured enemy documents indicate that a fourth type of round, namely shrapnel, is available for use with this weapon, no mention is made of it by PsW. For further details on the ammunition supply and other logistical requirements of North Korean artillery units, reference should be made to the research study titled "North Korean Logistics" published in ATIS Research Supplement, Interrogation Reports, North Korean Forces, dated 19 October 1950. (32)

G. Conduct of Fire

Immediately upon occupation of a new firing position, North Korean artillerymen run a position area survey and, if time permits, a target area survey. For this purpose, each battery has a survey section composed of a fire direction officer and four enlisted men. The battalion survey section is similarly staffed, but has one additional enlisted man. Depending on the time available, each battery makes from one to five surveys conducted from the various observation posts and from the battery command post. The resultant information, which includes identified targets, gun positions, observation posts, base points and check points, is plotted on firing charts furnished by battalion. These charts take the form of 1:25,000 base maps upon which a 1,000-meter grid has been superimposed. Although these charts are supposed to be very accurate, North Korean artillery commanders have indicated that they prefer to "shoot themselves in" whenever possible. Fire is adjusted with a single piece which is bore-sighted in advance to determine and correct sight errors. Shots are kept on the observer-target line and the target is bracketed for both range and deflection. According to one informant, the range adjustments are very bold and may involve an initial correction of up to 800 meters. Succeeding adjustments are halved to get on target. The firing data obtained by this method are compared with those of the survey to arrive at a "K" correction which, together with other essential target information, is transmitted to the remaining pieces. This method is used for adjustment prior to both precision and area fire. However, when the target is close to friendly troops a creeping technique may be adopted. On moving objects, fire is adjusted on a point along the anticipated line of march and brought to bear when the target reaches that point. When North Korean artillery is to support a night

(32) TIS (ADV) 771, 789, 831, 1073, 1087, 1271, 1405, 1607, 1790, 2255, 5039; ENEMY DOC #3 P/13, #8 P/29.

UNCLASSIFIED 24

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

engagement, fire is adjusted in advance during daylight hours. Although training is given in the use of meteorological data as factors in fire adjustment, PSW are unanimous in declaring that they are not used. In fact, most of the fire control instruments and techniques used by the enemy appear to be quite simple and almost crude according to US Army standards. For example, there is no evidence that modern fire direction center procedures or equipment are utilized in the North Korean Army. Instead, reliance seems to be placed on the battery commander's scope or binoculars which are used in conjunction with the mil relation formula as the principal means of conducting fire. One late report supplied by a captured North Korean major, formerly assigned to the artillery section of General Headquarters Advance Tactical Headquarters, indicates, however, that a system of locating UN artillery batteries by a flash ranging method is in use at present and is very effective. No use is made of aerial photographs, photomaps or artillery liaison planes and indications are that none of these are available to the enemy. (33)

When sufficient signal equipment is available, communications are established within the artillery firing battery between the battery commander's observation post, forward observation posts and gun positions. However, due to the North Korean Army's severe shortage of communication equipment, the battery net is frequently pared to the bone. To overcome the handicap imposed by inadequate signal communications, forward observation posts are established near enough to the battery commander's observation post (as a rule within 30 to 50 yd) so that target information can then be reported by voice or runner to the commander who, with the aid of several assistants, calculates and transmits firing data to the gun position by telephone or runner. Although this method seems cumbersome, the enemy is reported to have acquired such proficiency in it that the first round can be fired within two or three minutes after the initial sighting of the target. Thereafter, the rate of fire may approximate 25 rounds per minute in the case of the 76mm gun and 20 rounds per minute for the 120mm mortar.

Artillery commanders normally establish their command observation post as close to that of the supported unit commander as possible in order to facilitate liaison and command functions. As a further step to insure good cooperation between artillery and infantry at operational levels, liaison teams consisting of a company-grade officer and three or four enlisted men are frequently attached to infantry companies from the supporting artillery battery. These teams usually have no means of electrical communication. Consequently, when a target is located the officer in charge of the team prepares a rough target sketch giving the necessary information, checks it for accuracy with the infantry commander and dispatches it to his artillery unit by one of his enlisted assistants. (34)

- (33) TIS (ADV) 771, 1790, 1820, 3008, 3183, 5039; KT 468; ENEMY DOC BULLETIN #15 P/27.
(34) TIS (ADV) 129, 771, 789, 895, 1073, 1607, 1790, 3008, 3780, 5039; KT 468; ENEMY DOC #4 P/18; ENEMY DOC SUPPL #17 P/57.

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

Although unobserved fire is rare, there are indications that it also is conducted. When using uncorrected map data in firing an unobserved mission, the enemy takes into consideration the probability of error and sets in slightly different lateral and range data on each piece. The target area is then searched to a depth of 500 meters by making periodic 100-meter changes in range. A rule of thumb which holds that an area 200 meters square can be neutralized by 70 rounds of 76mm or 40 rounds of 122mm ammunition determines the total number of rounds to be fired during an unobserved mission. By the same rule, a target consisting of a convoy of 10 trucks moving with a 30-meter interval between vehicles can be destroyed by 24 rounds from a 76mm or 18 rounds from a 122mm weapon. While unobserved fire is uncommon in the North Korean Army, it is designed when used to harass UN troop concentrations and to interdict lines of communication. However, in view of the obsolete and insufficient fire control equipment available to the North Korean Army, the characteristics of the limited artillery available and the critical shortages of artillery weapons and ammunition, the enemy prefers to conserve his limited resources for more profitable fire missions. In fact, an analysis of interrogation reports indicates that pre-attack preparatory concentrations and harassing fires are, in the order named, the most popular types of missions fired by North Korean field artillery. Interrogation reports also contain scattered references to counter-battery and materiel destruction fires, but further details are lacking. (35)

Although the fire control system used by the North Korean Army theoretically permits the massing of fires of the entire division artillery, actually and due primarily to equipment shortages, the normal firing unit is the battery. When the tactical situation warrants and terrain features and adequacy of communications permit, the fires of a battalion can be, and apparently are, massed. A highly reliable source states, however, that only in permanent defenses is a greater massing of fire feasible or employed. This inability of the North Korean Army to mass the fire of larger artillery groupments is another factor that can be attributed to inadequate communications. Induced by an effective UN interdiction program of enemy supply and communication lines, this lack of communications coupled with the concomitant shortages of artillery weapons and ammunition has until recently sharply reduced the battle efficiency and support potential of the North Korean artillery arm despite the possession of a capable and battle-tested artillery doctrine adopted from the Soviet Army. (36)

3. ARTILLERY ORGANIZATION AND EQUIPMENT

A. General

Before the exigencies of the Korean War necessitated certain modifications in the organizational

(35) TIS (ADV) 129, 771, 789, 895, 1073, 1607, 1790, 3008, 3780, 5039; KT 468; ENEMY DOC #4 P/18; ENEMY DOC SUPPL #17 P/57.

(36) TIS (ADV) 771, 1789, 3183; KT 468.

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

structure of enemy combat units, the organic artillery support of the typical North Korean infantry division patterned itself closely after the artillery arm of the old-type Soviet rifle division of World War II. Like its Soviet prototype, the North Korean divisional artillery consists of an antitank battalion and a mixed field artillery regiment comprising two battalions of 76mm guns and one battalion of 122mm howitzers. However, to raise the support potential of the infantry division and to provide close-in support during the assault and exploitation phases of combat, a battalion of self-propelled guns was added to the division structure. The conformance of North Korean artillery to modes of organization that have become obsolete in the Soviet Army with the end of World War II can probably be attributed to the fact that the communist high command had gambled on the success of its military adventure in KOREA before effective opposition could be brought to bear from a major military force supported by a modern artillery and air arm. Consequently, the bulk of the equipment in the hands of the enemy's artillery units comes from Soviet surplus stocks and is not of the most recent design. In fact, there are strong indications that the USSR has been reluctant to supply her satellite with the most modern and effective artillery weapons, presumably because of inadequate stocks of these heavier and more modern pieces and in order to prevent their premature disclosure to UN Forces. (37)

Almost from the very beginning of the Korean War the enemy has suffered from increasingly more acute shortages of all types of artillery equipment and supplies that had their origin in inadequate initial stockpiles and the effective interdiction program of UN aircraft. Smaller artillery pieces and mortars, which the North Koreans classify as artillery in accordance with Soviet concepts, and the ammunition for these pieces have generally been available in tolerable, if not adequate, quantities in the past. On the other hand, heavier calibers of artillery and their ammunition, fire direction devices and particularly communications equipment have been severely affected by supply shortages. Coupled with deficiencies in trained personnel, these shortages have in many instances compelled field commanders to effect a number of more or less significant modifications in the structure of their artillery units in order to maximize available fire power. The most important and most frequently reported organizational change of this type resulted in a shift of specialization from the battalion to the battery level, presumably because of the enemy's inability to mass effectively the fires of units larger than batteries except under unusual circumstances. That is to say, whereas the standard T/O and E provided for two battalions of 76mm guns and one of 122mm howitzers, a reorganization took place in many units which culminated in the elimination of the 122mm howitzer battalion and the creation of three battalions of identical structure composed of two batteries of 76mm guns and one battery of 122mm howitzers. (38)

- (37) TIS (ADV) 30, 112, 503, 598, 988, 1403, 1533;
HQ EUSAK ARTY INFO BULLETIN #40.
(38) TIS (ADV) 771, 789, 831, 1468, 1488, 1588, 2255,
2861, 2914, 3130, 3152, 3153, 4010.

27 UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

In some cases supply and equipment shortages were so acute, however, that reorganization provided no solution for the low combat efficiency of North Korean artillery units and enemy commanders found it more profitable to employ their organic artillery arm in an infantry role, either as a tactical unit or by assigning personnel from the divisional artillery to the rifle regiments as replacements. Accentuated by the low mobility of North Korean artillery and the pronounced impediments to lateral movement, these shortages prompted further departure from accepted Soviet precepts on the organization and employment of artillery. Whereas the experiences of World War II had taught the Soviet Army the advantages of greater tactical flexibility and increased support potential inherent in concentrating the bulk of artillery at corps and higher echelons, the North Korean Army was obliged to institute precisely the reverse practice. Artillery reserves at corps and GHQ level were minimized -- a regiment of 122mm guns and/or howitzers came to constitute the normal reserve potential at those echelons -- in order to provide adequate artillery support at division level. (39)

By April 1951, however, preparations were in progress to bring most North Korean artillery units up to full strength and an intensive program of artillery training was instituted, normally under corps control, in anticipation of the arrival of large consignments of replacement weapons and artillery equipment. Reports indicate that such shipments started to roll into North Korea from the USSR in May 1951. This increase in Soviet aid made it possible for the enemy to expand his artillery units almost to pre-invasion strength and effectiveness and to restore the corps and GHQ artillery reserve and possibly to increase that reserve in some instances over previous levels. (40)

B. GHQ and Corps Artillery

The artillery section of the North Korean GHQ, in accordance with its functions of controlling all phases of artillery employment, training, supply and maintenance throughout the North Korean Army, consists of a tactical planning section, a training section, a reconnaissance section, an artillery ordnance section and probably a supply section. (See Chart No. 1) Headed by colonels or senior colonels, these staff sections come under the coordination and supervision of the chief of staff of the artillery section. From the start of the invasion until April 1951, the latest available date of information, Lieutenant General KIM-PONG-YUL, supposedly a Soviet citizen, was the chief artillery officer at the North Korean GHQ, while Major General CHON-HAK-CHUN acted as his chief of staff. At the North Korean Advanced Tactical Headquarters, or Front Headquarters as it is commonly called, the artillery staff was organized in essentially the same manner and, as of April 1951, was

(39) TIS (ADV) 771, 1607, 1611, 1822, 2861, 3237, 4074, 4079, 4096, 4289.

(40) TIS (ADV) 4074, 4079, 4096; KT #468.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

GHQ AND CORPS ARTILLERY OF THE
NORTH KOREAN ARMY

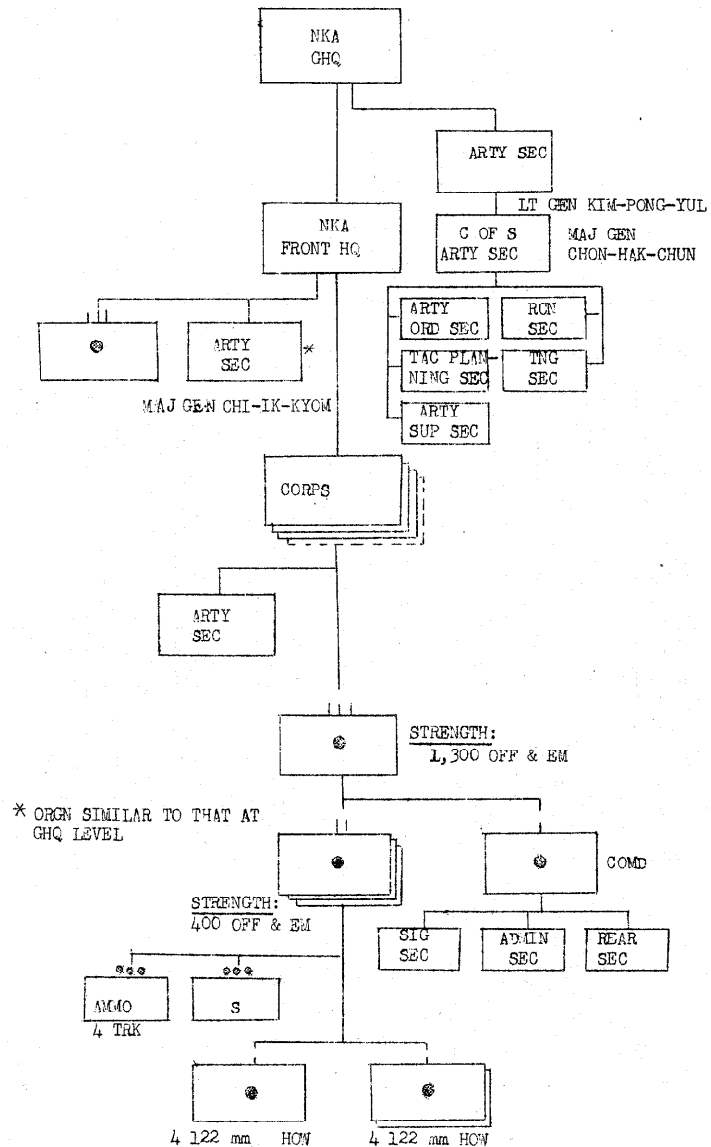


CHART 1

CHART PREPARED BY ATIS - GHQ, FEC
FROM MATERIAL OBTAINED FROM NK PW

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

under the command of Major General CHI-IK-KYOM. Normally headed by a senior colonel, the artillery sections at corps level adhered to the same pattern of staff organization as those in GHQ. (41)

The North Korean enemy, due to shortages in artillery weapons, the low mobility of his artillery over the mountainous topography of KOREA, and the effective UN air interdiction of hostile lines of communication, has found it preferable to concentrate the bulk of his artillery support potential within the organizational framework of his combat divisions. Accordingly, the artillery reserve at GHQ and corps level is held to a minimum. At the start of the invasion this reserve probably consisted of one artillery regiment assigned to the North Korean GHQ plus an additional artillery regiment for each of the two corps that were in existence at that time. While these units were by no means entirely uniform in their organization and equipment, most references indicate that the typical artillery regiment of this type is commanded by a colonel, had a peacetime strength of approximately 1,300 officers and men, and is composed of a regimental headquarters and three artillery battalions. (See Chart No. 1) The bulk of the 100 officers and men staffing the regimental headquarters are assigned to a command battery. In view of the fact that the regiment is only an administrative and not a tactical unit (for GHQ and corps artillery units are usually attached to subordinate combat commands piecemeal by battalions and sometimes by batteries), the regimental staff performs its predominantly administrative functions through an administration section, a signal section and the regimental rear services, and seems to have included no operations section or reconnaissance section. As a further consequence of the enemy's tendency to employ corps and GHQ artillery piecemeal, all three artillery battalions are identical in structure. With an aggregate strength of around 400 officers and enlisted men, each battalion is composed of two batteries of four 122mm guns, one battery of four 122mm howitzers, a signal platoon and an ammunition platoon equipped with four trucks. Thus, the average corps or GHQ artillery battalion has a total armament of eight 122mm guns (most of which are Soviet M-1931/37 pieces) and four 122mm howitzers (which generally are Soviet M-1938 weapons) and the total armament of the entire regiment amounts to 24 122mm guns and 12 122mm howitzers. (42)

In place of the 122mm howitzer it would normally be expected to find the 152mm howitzer or gun-howitzer included in the North Korean corps artillery organization because of the complementary role of that weapon in relation to the 122mm gun. In fact, several isolated references to 152mm corps artillery pieces have been found in PW interrogation reports. One typical example is the statement of an officer assigned to the North Korean 3d Division who claims that in the initial invasion across the 38th Parallel his unit received the support of a number of 152mm corps artillery howitzers. How-

(41) TIS (ADV) 771, 1468, 1607; KT 468.

(42) TIS (ADV) 771, 1468, 1607, 1611, 1822, 4289, 4293; KT 468; ENEMY DOC #4 P/17; CURRENT TRANS #3 P/1.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

ever, the comparative scarcity of these references and the fact that in most instances corps and GHQ artillery units were, even initially, equipped only with 122mm guns and howitzers suggest that the quantity of heavier weapons which the North Koreans received from the USSR was negligible and did not allow for their inclusion in the standard organization of the North Korean GHQ and corps artillery reserve. But with the marked increase of Soviet assistance apparent since the spring of 1951, this picture seems to have changed materially, as evidenced by a captured member of the 46th Division who revealed that in March 1951 a battalion of 152mm guns (probably gun-howitzers) constituted the artillery reserve of the North Korean VIII Corps. (43)

In the course of the complete rout and headlong retreat that followed the UN counteroffensive of September 1950, the North Korean Army lost or abandoned practically all of its artillery including, presumably, the major portion of its corps artillery. Due to the ensuing acute shortages in artillery weapons and trained personnel, significant modifications were effected in the organizational pattern of the reconstituted North Korean Army's artillery reserve. With one or two exceptions each of the newly-organized eight corps again received the support of an artillery regiment; but since the availability of artillery pieces and personnel seems to have been the primary determinant of their structure and armament, these regiments varied considerably in organization. For instance, information dating from the middle of March 1951 indicates that the artillery regiment of the VI Corps possessed six 122mm howitzers, nine 76mm guns and 30 miscellaneous trucks; that of the III Corps, on the other hand, was equipped with three 122mm howitzers, seven medium caliber (probably 85mm) antitank guns and 10 45mm antitank guns. The complete absence of references to GHQ artillery units; furthermore, suggests that until recently, at least, no replacement was provided for the GHQ artillery regiment that suffered annihilation in the autumn 1950 defeat of the North Korean Army. Recent information supplied by an unusually well-informed senior artillery officer of the enemy indicates, however, that sufficient quantities of field artillery, mortars and antitank weapons were received from the USSR in May 1951 to restore the fire power of most or all North Korean combat divisions to pre-war standards. Although permitting of an ambiguous interpretation, the report of this source seems to indicate that a considerable portion of the artillery units equipped with these new weapons were removed from division control and placed under corps jurisdiction either in order to receive intensive instruction in the firing and tactical employment of these weapons or to increase the artillery reserve available at corps level. If the latter interpretation be correct, the enemy, prompted by an improved supply of artillery equipment and the ability of faster lateral displacement made possible by a reduction in the width of corps sectors, has affected an increased centralization of artillery aimed at improving its flexibility in accordance with accepted Soviet tactical concepts. (44)

(43) TIS (ADV) 181, 598, 771, 1403, 1533, 4220.

(44) TIS (ADV) 4220, 4289, 4293; KT 468.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

C. Divisional Artillery

(1) General

The divisional artillery of the typical North Korean infantry division consists of an antitank battalion, a self-propelled gun battalion and a mixed regiment of field artillery. (See Chart No. 2) The Commander of the division artillery regiment functions concurrently as the artillery officer on the staff of the division commander and heads the artillery section on the special staff of the division; the latter is manned by 10 officers and 40 enlisted men. In this dual function he rates the rank of colonel or senior colonel. In addition to normal command responsibilities consonant with his position as artillery commander, the duties of this officer include the timely and coordinated employment of artillery support, planning for the delivery of maximum fire power in support of the main effort, and coordinated displacement of supporting artillery as the situation develops. The division artillery commander, in his position as special staff officer, is furthermore responsible for supervising and coordinating the support effort of artillery weapons at regimental level. (45)

(2) Divisional Field Artillery Regiment

(a) General

At full strength and with normal structure, the divisional artillery regiment consists of a regimental headquarters, two gun battalions equipped with 76mm pieces and one howitzer battalion equipped with 122mm howitzers. (See Chart No. 3) Its aggregate strength of not quite 1,200 troops includes approximately 130 officers, 286 noncommissioned officers and 778 privates. The regiment's total armament includes 24 76mm field guns and 12 122mm howitzers; these pieces have been adopted from the Soviet Army and are considered complementary in performance and tactical employment. In the course of the war, a change in organization seems to have been effected in some divisions which resulted in the formation of three identical artillery battalions, each composed of two 76mm gun batteries and one 122mm howitzer battery. However, this structure is by no means universal and has remained the exception rather than the rule. (46)

(b) Regimental Headquarters

The headquarters of the divisional artillery regiment is staffed by some 250 officers and men and is comprised of the regimental staff, the regimental rear services and a command (or headquarters) battery. (See Chart No. 3) An operations section, a reconnaissance section, a topographic section, a signal section and a personnel section comprise the staff of the divisional field artillery regiment. Collectively,

- (45) TIS (ADV) 789, 2206, 2255, 3151; ENEMY DOC #4 P/18; ENEMY DOC SUPPL #5 P/3, 104, #23 P/1, 53.
(46) TIS (ADV) 32, 109, 612, 665, 771, 789, 902, 995, 1146, 1234, 1588, 2206, 3151, 3287, 3302; ENEMY DOC #6 P/74.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~
UNCLASSIFIED

they come under the control of the operations officer and are integrated into a so-called staff section. The rear services organization has a strength of approximately 80 officers and men and performs all logistical support and maintenance functions within the regiment. It consists of ammunition, food and clothing supply sections, an ordnance maintenance section, a finance section, a transportation platoon, a medical platoon and a band platoon. With an aggregate of approximately 80 officers and enlisted men the command battery is organized into a topographic platoon, which collects target information and runs surveys; a reconnaissance platoon; and a signal platoon composed of three wire squads and one radio squad. The signal platoon is equipped with 11 field telephones, three radios and two switchboards. (47)

(c) 76mm Gun Battalion

Each of the two 76mm gun battalions of the field artillery regiment is normally commanded by a major and has a strength of about 26 officers and 250 enlisted men. When organized along standard lines, the typical battalion consists of three gun batteries and a battalion headquarters. (See Chart No. 3) The 12 Soviet M-1942 field guns comprising the primary armament of each battalion are standard Soviet light field pieces capable of firing either normal field artillery or antitank missions. Battalion headquarters includes a command platoon composed of a signal section and reconnaissance section and having a strength of one officer, 17 non-commissioned officers and 31 privates, a staff section that is comparable in composition to the one at regimental level; and the battalion rear services staffed by about 25 officers and men and comprised of a supply and ammunition section, a transportation section, an ordnance maintenance section and a small medical platoon. One unconfirmed report indicates that an anti-aircraft machine gun platoon may have been added to the artillery battalion structure in the spring of 1951 to provide organic protection against the omni-present threat of UN air attack. (48)

Each of the three gun batteries has a strength of five officers and 73 enlisted men and is normally commanded by a senior lieutenant or captain. Four trucks, five horsecarts and a number of horses are assigned to the battery as prime movers and supply vehicles for the four 76mm guns. Officers in the battery are armed with pistols, enlisted men with submachine guns or rifles. In addition to the two gun platoons to which the field pieces are assigned, the battery is comprised of a battery headquarters, a command platoon and an ammunition platoon or section. Battery headquarters includes the battery commander, his executive officer, the battery first sergeant, a medical aid man, and mess, supply and clerical personnel. The command platoon has a strength of one officer and 17 enlisted men and is composed of a reconnaissance and observation section,

- (47) TIS (ADV) 32, 285, 737, 789, 902, 995, 1073, 1088, 1102, 1504, 1561, 1621, 1622, 1683, 1782, 2860, 3151, 3167, 3183, 3302, 3530; FR (KOREA) #18.
(48) TIS (ADV) 32, 789, 902, 995, 1102, 1234, 1561, 1581, 1683, 2860, 2864, 3183, 3302, 3460, 3530; KT #381; FR (KOREA) #549; ENEMY DOC #6 P/74.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

ORGANIC ARTILLERY OF THE TYPICAL NORTH KOREAN INFANTRY DIVISION

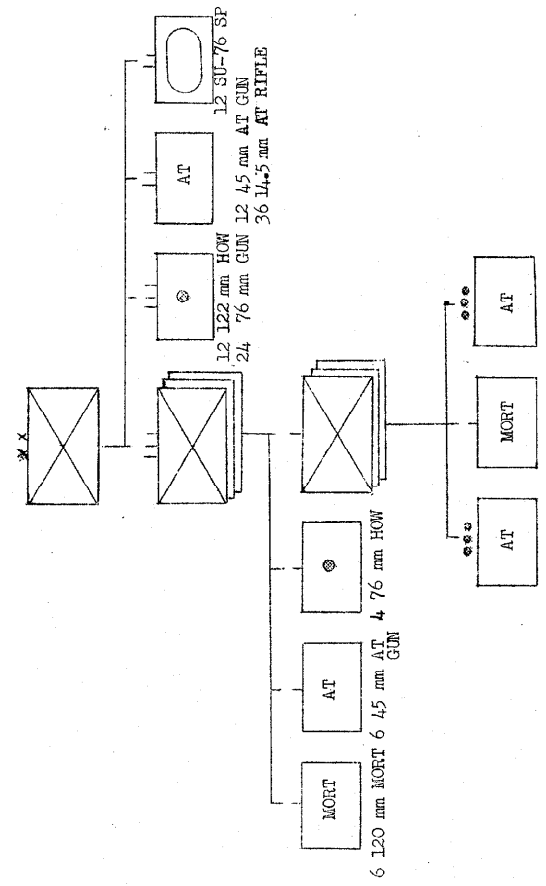


CHART PREPARED BY ATIS - CHQ, FEC
FROM MATERIAL OBTAINED FROM NK POW

CHART 2

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

DIVISIONAL FIELD ARTILLERY REGIMENT OF THE NORTH KOREAN ARMY

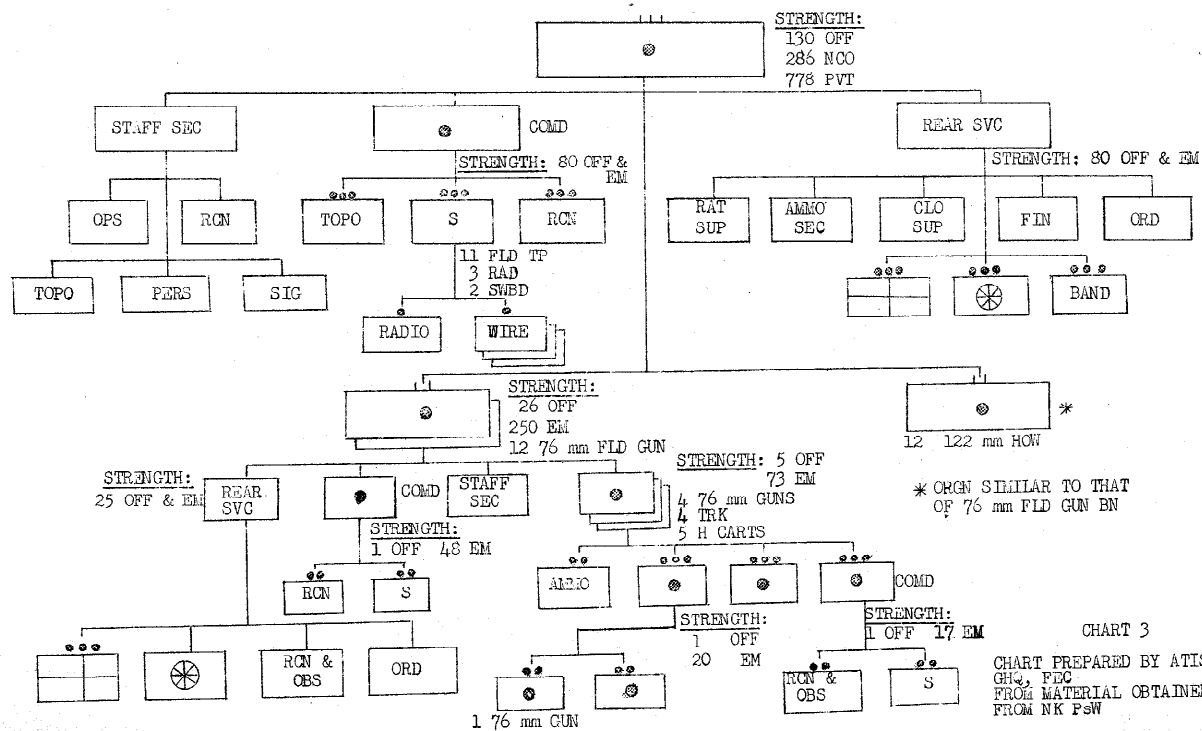


CHART 3

CHART PREPARED BY ATIS -
 GHQ, FEC
 FROM MATERIAL OBTAINED
 FROM NK POW

SECRET - SECURITY INFORMATION

UNCLASSIFIED

UNCLASSIFIED

SECRET - SECURITY INFORMATION

UNCLASSIFIED

equipped with binoculars, periscopes and compasses; and a signal section which maintains signal communications, by means of three radios and four field telephones, between battery and battalion and within the battery between the battery commander's observation post, the gun positions and the forward observation post. (49)

Operationally, the two gun platoons collectively come under the control of the battery executive officer, who remains at the gun positions and directs the fire of the battery. Each platoon is manned by one officer and 20 enlisted men and consists of two firing sections (or squads in North Korean terminology) of the following composition: a chief gunner, who acts as the section leader; two assistant gunners, one of whom functions at the same time as assistant section leader; one loader; one fuze setter; two ammunition carriers; and two drivers. (50)

(d) 122mm Howitzer Battalion

Also commanded by a major and composed of three batteries, the 122mm howitzer battalion has an organizational structure that is almost identical to that of the 76mm gun battalion. (See Chart No. 3) Both types of battalions have about the same total strength and their headquarters are organized according to the same pattern. The 12 122mm M-1938 howitzers of the battalion are divided equally among the three batteries, each of which has a normal personnel complement of five officers and approximately 80 enlisted men. Other than this minor difference in strength, both the 122mm howitzer battery and the 76mm gun battery were, to all intents and purposes, poured from the identical mold. While the 122mm howitzer is a standard Soviet field piece of comparably modern design, North Korean artillery experts complain of a structural weakness in the equilibrator spring which limits the effectiveness of the piece. (51)

(3) Divisional Antitank Battalion

When at full strength, the organic antitank battalion of the North Korean infantry division has a personnel complement of 274 troops, including 32 officers, 98 noncommissioned officers and 144 privates. (See Chart No. 4) As a rule it is commanded by a major and consists of a battalion staff of normal composition; a headquarters company made up of a signal platoon and a reconnaissance platoon; the battalion rear services, comprised of an ammunition platoon, an intendants platoon and a maintenance platoon; one antitank rifle company; and three antitank gun companies. This structure provides the battalion with a total armament of 12 truck-towed 45mm antitank guns, 36 14.5mm antitank rifles and the following small arms: 32 pistols, 72 rifles and 134 sub-machine guns. In addition, the battalion is equipped with nine Vep pistols, one supply truck and 12 trucks used as prime movers and ammunition transports. (52)

- (49) TIS (ADV) 789, 1146, 1173, 1236, 1251, 1588, 2664, 3302; FR (KOREA) #18; ENEMY DOC #6 P/74.
(50) TIS (ADV) 789, 1234, 3302; FR (KOREA) #18.
(51) TIS (ADV) 789, 1251, 1561, 1588.
(52) TIS (ADV) 136, 1123, 1419, 1430, 1459, 3779.

UNCLASSIFIED

UNCLASSIFIED

The antitank rifle company of the divisional antitank battalion is commonly commanded by a senior lieutenant or captain and consists of four platoons, each equipped with nine antitank rifles. It is manned by five officers, 23 noncommissioned officers and 30 privates. The 36 14.5mm antitank rifles of Soviet manufacture comprising the standard armament of this company may at times be replaced by an equal number of 12.7mm antiaircraft machine guns depending, it seems, upon the availability of each. (53)

With a strength of five officers and 45 enlisted men, each of the three antitank gun companies is equipped with four 45mm M-1942 antitank guns and is composed of two gun platoons and one command platoon. A captain is the company commander in most instances. The standard gun platoon musters one officer, the platoon leader, and approximately 16 enlisted men and may be subdivided into two gun squads, each of which is equipped with one antitank gun. This weapon, though it is the standard antitank gun of the North Korean Army, has only limited effectiveness against modern armor; nor is it particularly suitable for field artillery missions. North Korean ordnance personnel, furthermore, reveal that the recoil spring of this gun rapidly loses its tensile strength and claim that the average North Korean antitank gunner finds it difficult to comprehend the functioning of the automatic breech. Enemy commanders, therefore, are apt to abandon these guns when in a tight tactical situation. (54)

(4) Divisional Self-propelled Gun Battalion

At the start of the invasion, each North Korean infantry division enjoyed the support of an organic battalion of self-propelled guns designed to perform antitank missions and provide assault echelons of the enemy with close-in supporting fire. However, the vulnerability of the SU-76 self-propelled gun to air and ground attack resulted in a high rate of attrition, which sharply reduced the strength and combat effectiveness of this battalion in most divisions. At full strength, the typical divisional self-propelled gun battalion has a personnel complement of 159 troops, including 37 officers, 90 noncommissioned officers and 32 privates. It is normally commanded by a major or lieutenant colonel and is composed of three gun companies and a battalion headquarters. (See Chart No. 5) Sixteen SU-76 self-propelled guns constitute the primary armament of the battalion. One of these weapons is assigned to the battalion commander as his command vehicle, while the remaining guns are divided equally among the companies, with five guns assigned to each. (55)

Typical of the general line of obsolescent and often inferior equipment with which the USSR supplied her North Korean satellite, the SU-76 encountered in KOREA has an open-topped fighting compartment, a deficiency which makes it extremely vulnerable to ground

(53) TIS (ADV) 1123, 1430, 3779; ENEMY DOC #2 P/100.

(54) TIS (ADV) 1430, 1611, 1900, 2225; ENEMY DOC #2 P/100.

(55) TIS (ADV) 406, 973, 987, 1159, 1285, 1550, 1582, 1988, 2158; ENEMY DOC #6 P/75, #17 P/3.

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

DIVISIONAL ANTITANK BATTALION OF THE NORTH KOREAN ARMY

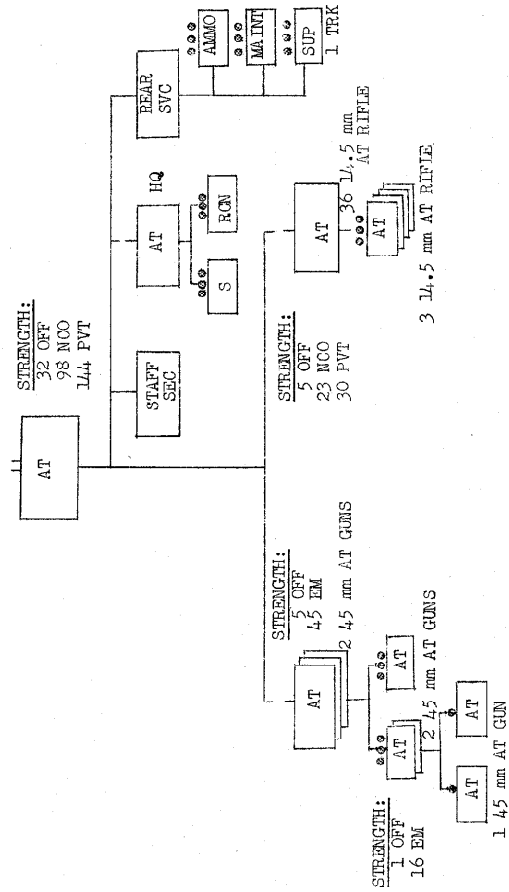


CHART 4

CHART PREPARED BY ATIS - GHQ, FEC
FROM MATERIAL OBTAINED FROM NK POW

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

attack and which was eliminated in later Soviet models. The weapon is constructed from a lengthened T-70 light tank chassis and is mounted with a 76.2mm M-1942 gun which has a traverse of 30°, an elevation of 15° and a depression of 5°. In addition, each SU-76 is armed with one 7.62mm DT armored-vehicle machine gun and two PPsh 1941 submachine guns. For these weapons it normally carries the following types and quantities of ammunition: 60 rounds of 76mm ammunition (30 rounds HE, 25 rounds HEAT and five rounds APAT), 945 rounds of DT machine gun ammunition, 426 rounds of submachine gun ammunition and 10 hand grenades. With its total weight of 10½ tons, the vehicle can achieve a maximum road speed of 20 mph; it can negotiate a 30° slope and has a maximum range in KOREA of approximately 120 miles. Its two 70-hp engines require a high-octane aviation gasoline and are provided with four forward speeds and one reverse. A 9-R or 12-PTM transceiver and TPU-3 intercommunication set are mounted into each gun to permit coordination among different guns and among crew members within each gun. (56)

Headquarters of the divisional self-propelled gun battalion consists of a small cultural section, a staff section, a signal platoon and the battalion rear services. The staff section is of normal composition and includes an operations officer, a communications officer and a personnel officer. The signal platoon has a strength of two officers and 10 to 15 enlisted men and is equipped with three or four field telephones and one 12-RF radio. A maintenance platoon of 17 men and a supply section staffed by approximately 15 men and equipped with two or three trucks are included in the rear services organization of the battalion. (57)

Each of the three self-propelled gun companies has a strength of five officers and approximately 25 enlisted men and is commanded by a captain. One of the five self-propelled guns is assigned to the company commander; the others are allotted equally to the two platoons in each company. The platoon leader, who is a lieutenant as a rule, rides in one of the two guns assigned to his platoon. Normally the crew of an SU-76 consists of four noncommissioned officers: a gun commander (usually a master sergeant), a gunner, a driver (both of whom are sergeants) and an ammunition loader (usually a junior sergeant). As a rule, the gun commander operates the communications equipment as well. An executive officer, a cultural officer, a mechanic, and supply and clerical personnel comprise the headquarters of a self-propelled gun company. (58)

D. Regimental Artillery

(1) General

The organic artillery support of the North Korean rifle regiment consists of a howitzer battery

(56) TIS (ADV) 406, 987, 1159, 1550, 1988; ENEMY DOC #17 P/1.

(57) TIS (ADV) 23, 58, 126, 147, 155, 178, 188, 198, 406, 973, 987, 1159, 1282, 1285, 1550, 1988.

(58) TIS (ADV) 406, 987, 1159, 1550, 1582, 2158.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

equipped with four 76mm howitzers, a mortar company equipped with six 120mm mortars and an antitank company equipped with six 45mm antitank guns. (See Chart No. 6) These three companies are not organized into a mixed artillery battalion but fire supporting missions for the rifle regiment under the coordination of the regimental artillery officer. However, the artillery organic to regiment, supplemented when necessary by battalion artillery units and attached artillery from neighboring regiments and from division, may be organized into groupments tailored to meet a particular tactical situation. (59)

(2) 76mm Howitzer Battery

In its strength, composition and equipment the regimental howitzer battery is comparable to the 76mm gun battery of the divisional mixed field artillery regiment. (See Chart No. 6) Staffed by five or six officers and about 75 enlisted men, it is composed of a battery headquarters and two howitzer platoons. Battery headquarters includes a command platoon and an ammunition platoon. The four 76mm M-1927 or M-1943 howitzers that constitute the primary armament of this battery are distributed equally between these two platoons. While this comparatively light artillery piece has proved its effectiveness in the rugged Korean terrain, it suffers nevertheless from certain mechanical defects, according to a North Korean ordnance expert who claims that the gas cylinder plug easily becomes loose thereby reducing oil and air pressure so that the piece frequently fails to return to battery. (60)

(3) Antitank Company

The regimental antitank company is almost identical in its organizational structure to the corresponding companies of the divisional antitank battalion. (See Chart No. 6) Its personnel complement of five officers, 23 noncommissioned officers and 30 privates is organized into three gun platoons, each equipped with two 45mm antitank guns, and a command platoon. In addition to its primary armament, the company is also equipped with 18 light machine guns and six trucks used as prime movers for the antitank guns. Each of the three platoons is commanded by a lieutenant and breaks down into two gun squads of eight men each. (61)

(4) 120mm Mortar Company

The regimental mortar company consists of a company headquarters and three mortar platoons. (See Chart No. 6) It has an aggregate strength of 60 troops, including five officers, 13 noncommissioned officers and 42 privates, and is equipped with six 120mm M-1943 mortars. In accordance with Soviet tactical concepts, this weapon is considered as artillery and is often employed

(59) TIS (ADV) 659, 947, 1548, 2009, 2385, 3777; KT 110.

(60) TIS (ADV) 659, 705, 947, 1508, 1548, 1581, 1611, 1773, 1900, 2009, 3780, 3783; KT 110.

(61) TIS (ADV) 659, 947, 1190, 1389, 1548, 2009, 3778; KT 110; ENEMY DOC #2 P/100, #3 P/3.

UNCLASSIFIED

UNCLASSIFIED

DIVISIONAL SELF-PROPELLED GUN BATTALION OF THE KOREAN ARMY

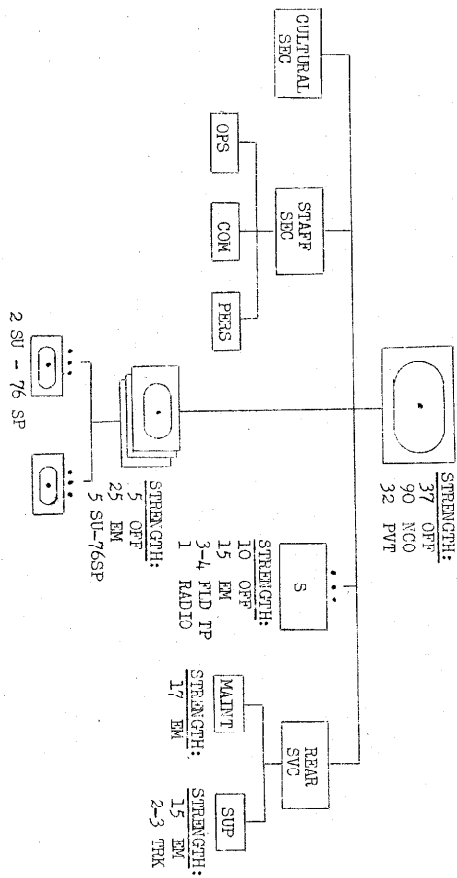


CHART PREPARED BY ATIS - GHQ, FEC
FROM MATERIAL OBTAINED FROM NK FSW

CHART 5

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

in a light field artillery role because of its maneuverability, fire power and, for a mortar, considerable range. Headquarters of the mortar company includes the company commander, his executive, a political officer, two sergeants charged with responsibility for company administration and supply, and a command squad. Staffed by a sergeant and nine privates, the command squad performs reconnaissance, signal and observation duties. Each of the three mortar platoons has a strength of one officer and 14 enlisted men and consists of two squads equipped with one mortar each. A squad leader, a gunner and five ammunition bearers constitute the normal mortar squad. (62)

E. Battalion Artillery

(1) General

Rifle battalions of the North Korean Army normally enjoy the support of a mortar company equipped with nine 82mm mortars, an antitank gun platoon equipped with two 45mm antitank guns and an antitank rifle platoon equipped with nine 14.5mm antitank rifles. (See Chart No. 6) There is no artillery officer at battalion level. Consequently, these units have not been integrated into a cohesive and unified battalion artillery organization but answer directly to the battalion commander. The supporting weapons assigned to battalion, notably the mortars, may, however, become part of a Soviet-type artillery groupment under regimental control. (63)

(2) 82mm Mortar Company

Commanded by a senior lieutenant or captain, the 82mm mortar company of the rifle regiment has a T/O strength of five officers, 21 noncommissioned officers and 30 privates. (See Chart No. 6) In addition to its primary armament of nine Soviet 82mm mortars, the company is equipped with five pistols, an equal number of carbines, 46 rifles and one horse-cart. Each of the three mortar platoons comprising the company consists of three squads and is armed with three mortars, one per squad. (64)

(3) Antitank Gun Platoon

The antitank gun platoon assigned to each rifle battalion is comparable in composition and equipment to the gun platoons of the antitank company at regimental level. (See Chart No. 6) It has a strength of one officer, six noncommissioned officers and from 10 to 15 privates, and is composed of two squads, each equipped with one 45mm antitank gun. While officers and noncommissioned officers carry the standard small arms consonant with their rank, gun crews are armed with submachine guns for close-in protection of the gun positions against

- (62) TIS (ADV) 325, 852, 902, 995, 1078, 1548, 1773, 2009, 3872; KT #110; ENEMY DOC #1 P/49.
(63) TIS (ADV) 1, 949, 1156, 1256, 2009; FR (KOREA) 331.
(64) TIS (ADV) 1, 852, 949, 1156, 1256, 1497, 1900, 1955, 2009; FR (KOREA) 331; ENEMY DOC #2 P/4, #3 P/45; ATIS BULLETIN #6 P/10.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

infantry attack. (65)

(4) Antitank Rifle Platoon

In its organizational structure, the antitank rifle platoon organic to battalion is identical to the corresponding platoons of the antitank rifle company found in the divisional antitank battalion. (See Chart No. 6) Its personnel strength of one officer, six non-commissioned officers and 14 privates is organized into three squads, each of which is armed with three Soviet 14.5mm antitank rifles. Personal weapons found in this platoon include a pistol for the platoon leader and carbines or rifles for the remainder of the personnel. (66)

4. ARTILLERY COMMUNICATIONS

While artillery communication facilities in the North Korean Army were never elaborate by Western standards, they were established in consonance with sound Soviet signal doctrine and, initially at least, were fully adequate to the needs of North Korean artillery. However, with the progress of the war, signal communications in artillery units of the enemy became increasingly more unreliable. Due to the dearth of skilled operational and maintenance personnel and acute supply deficiencies occasioned by incessant UN air strikes, equipment damaged or lost in combat could rarely be repaired or replaced. Consequently, the enemy has been forced to cut artillery signal nets to the bone and to rely more and more on visual signals, messengers and make-shift expedients. This enforced reliance upon primitive methods of communication has in many cases imposed such severe limitations on the tactical employment of North Korean artillery as to seriously impair its combat effectiveness. Hence, while adhering basically to Soviet concepts of signal communications, North Korean commanders, because of these severe dislocations in signal materiel, were forced to effect a number of significant modifications in this doctrine in order to preserve even a semblance of organized communication networks within their units. (67)

The signal doctrine of the North Korean Army, described in detail in Research Supplement, Interrogation Reports, Issue No. 4, ATIS, GHQ, FEC dated 15 December 1950, provides for an artillery communication system comprised of a command net and a staff net. (See Sketches No. 1 and 2) The former connects at each echelon the command observation post of the senior commander with those of his immediate subordinate commanders. At battery level, a fire control net takes the place of the command net. It embraces the battery commander's observation post, the various forward observation posts, and the gun positions. Although wire is considered to be the primary means of communication, the command net telephone system is paralleled by a radio network for use in fluid situations or when the wire

- (65) TIS (ADV) 852, 1256, 2009, 2524, 3872; FR (KOREA) 331; ENEMY DOC #2 P/4, #3 P/45, 46; ATIS BULLETIN #2 P/4, #6 P/10.
(66) TIS (ADV) 667, 852, 1256; FR (KOREA) 331; ENEMY DOC #2 P/4, #6 P/10; ATIS BULLETIN #2 P/4.
(67) TIS (ADV) 771, 1101, 1405, 1430, 1468, 4047.

UNCLASSIFIED

38

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

UNCLASSIFIED



~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

system fails. The staff net of the artillery regiment is a purely administrative communication system connecting the command posts of all echelons down to battalion level. At each echelon there is a connection through the unit switchboard with the command net in order that each net assures an alternate means of communications for the other and in order to establish a direct channel of communication between the commander and his staff. However, since the adopted Soviet doctrine calls for ruthless economy in sectors of secondary importance in order to concentrate signal equipment in the area of the main effort, the staff net may, depending on the tactical situation, be dispensed with entirely. Primarily to facilitate close liaison but also as an economy measure, the command observation posts of the infantry and artillery commanders are combined whenever possible. This also provides both commanders with an additional alternate method of communication in case of an emergency. In the event that the tactical situation does not permit the physical combination of these two command observation posts, the responsibility for establishing communications with the supported unit devolves upon the artillery signal section in accordance with accepted Soviet communication concepts which define the direction of signal responsibility as being down and to the left and from supporting to supported unit. (68)

While Soviet signal doctrine, as initially adopted by the North Korean enemy, advocated economy in the employment of signal equipment and anticipated normal losses of materiel during battle, it did not provide an adequate solution to the problem presented by the disastrous rate of attrition in signal materiel that resulted from UN air and ground operations and abuse by untrained personnel. Thus, North Korean artillery battalions originally were equipped with approximately 13 telephones and a like number of radios, broken down to provide for three of each per battery and four per battalion headquarters; but already by August 1950 interrogation reports cite some instances in which there were no radios and only one or two telephones in an entire battalion. To cope with materiel shortages such as these, each artillery signal unit utilizes the most expedient means of communication available in order to execute its mission as effectively as possible. For instance, in many cases runners are used to convey messages between battalion and batteries and contact with higher headquarters often depends upon officer couriers. In the past, too, forward observers seldom had radio or wire contact with their artillery but were obliged to rely on sketches dispatched by messenger to indicate target locations. (69)

In addition to actual materiel shortages, the inferior quality of some of the equipment supplied by the USSR imposes a further strain on the system of artillery communications. For example, the poor quality of Soviet telephone wire forced some batteries to adopt a relay system of transmitting firing data by placing additional

- (68) TIS (ADV) 419, 703, 771, 1167, 1271, 1614, 1710; ENEMY DOC #5 P/54-70; ENEMY DOC SUPPL #17 P/89.
(69) TIS (ADV) 703, 771, 1068, 1086, 1100, 1151, 1164, 1366, 1405, 1430, 1588, 1607, 3416, 3439; KT 0013, 0016; ENEMY DOC #5 P/54-70.

UNCLASSIFIED

39
~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

telephones in the line between the observation post and the gun position. Communications personnel assigned to North Korean artillery units also attribute frequent difficulties in wireless transmission and reception to the inferiority of their Soviet radio sets. A captured senior colonel of the North Korean 5th Division states, for instance: "Radios failed frequently during combat due to the rapid deterioration of Soviet dry-cell batteries. The storing of these batteries for even a short time will completely drain them of power." (70)

In an effort to alleviate the handicap imposed by materiel shortages and the inferiority of some of the older Soviet supplies, the North Korean Army emphasizes the full utilization of abandoned UN signal equipment and organizes special teams to comb combat areas for such items. That phenomenal success has been met with in this project is testified to by a captured North Korean master sergeant who claims that during a period of four or five days in May 1951 his salvage team of 10 men collected 16 radios from wrecked UN vehicles and 70,000 meters of abandoned telephone wire near HWACH'ON (38°06'N-127°42'E). A captured battle statistics bulletin issued by GHQ of the North Korean Army on 27 May 1951 lists the total amount of wire communications equipment captured from UN Forces as 468 field telephones and 1,272 km of wire. (71)

In addition to the direct approach to supply deficiencies as outlined in the preceding paragraph, North Korean artillery commanders instituted a program of basic and refresher signal training during the first part of January 1951. This training was designed to increase the proficiency of operating and maintenance personnel and thereby indirectly to ease the logistical strain by prolonging the functional life of available signal equipment. At the same time this program was to enhance the tactical skill of the artillery arm as a whole. The training course is conducted within each division and lasts a period of three months. It is very intense with classes continuing eight hours per day, six days per week. When coupled with the current salvage operations, this program is indicative of the concerted effort being made to eliminate the bottleneck in communications which in the past proved to be one of the biggest single handicaps in the effective tactical employment of North Korean artillery. (72)

5. ARTILLERY TRAINING

A. General

Prior to 25 June 1950, North Korean artillery personnel seem to have received comparatively extensive and, according to North Korean Army standards, thorough artillery training. Initially, the individual training term lasted up to two years; however, as the war progressed and North Korean artillery units suffered heavy personnel and equipment losses under increasingly powerful UN

(70) TIS (ADV) 1093, 1164, 2255.

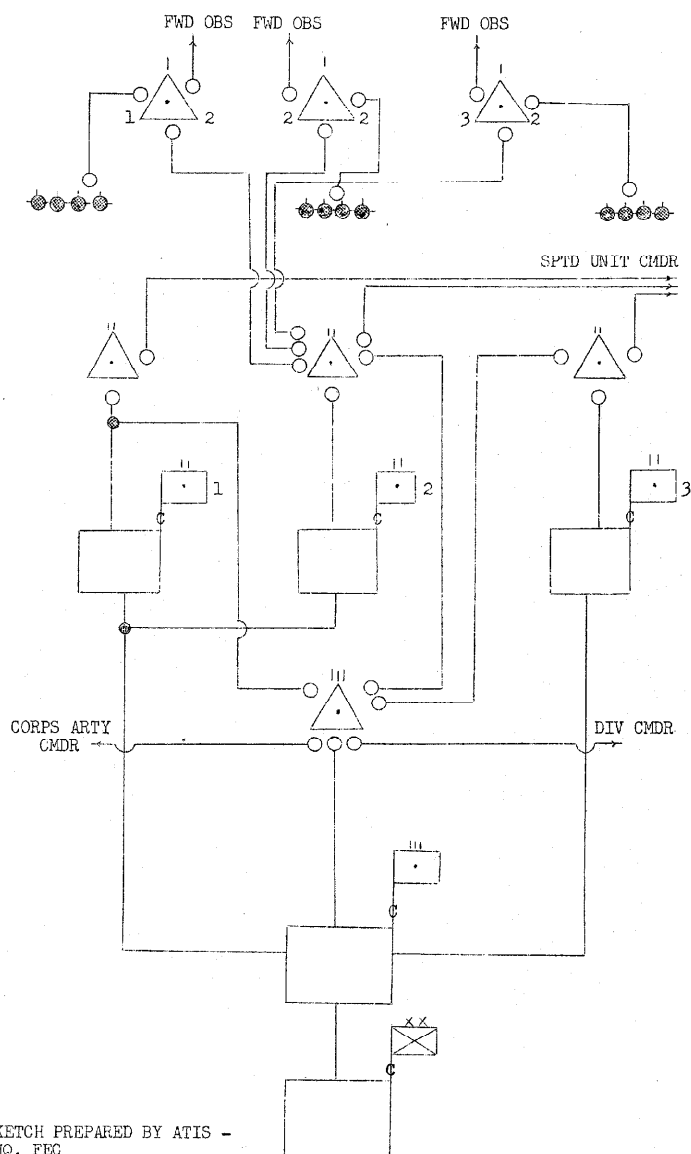
(71) KT 0027, 1140, 1153, 1156; ENEMY DOC BULLETIN #33 P/8.

(72) KT 0946, 0703, 1044.

UNCLASSIFIED

UNCLASSIFIED

ARTILLERY WIRE NETWORK OF THE NORTH
KOREAN INFANTRY DIVISION



SKETCH PREPARED BY ATIS -
GHQ, FEC
FROM MATERIAL OBTAINED FROM
NK POW AND CAPTURED ENEMY
DOCUMENTS

UNCLASSIFIED

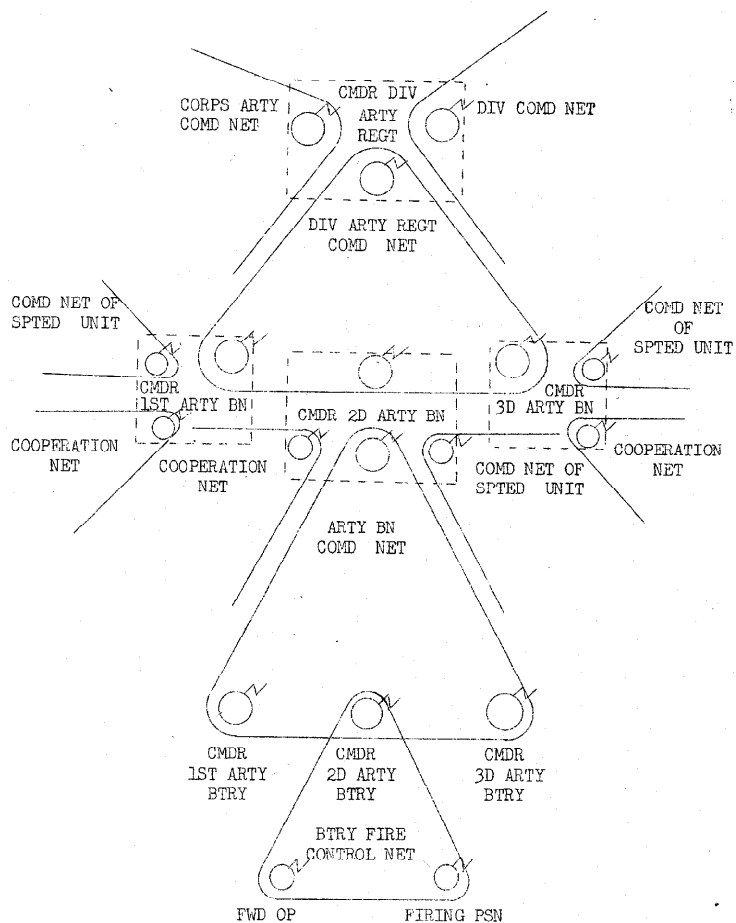
SKETCH 1

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

ARTILLERY RADIO NETS OF THE
NORTH KOREAN INFANTRY DIVISION



NOTE: THE COOPERATION NET CONNECTS THE ARTILLERY
WITH ALL OTHER NON-ORGANIC SUPPORT TROOPS

SKETCH PREPARED BY ATIS - GHQ, FEC
FROM MATERIAL OBTAINED FROM NK POW
AND CAPTURED ENEMY SOURCES

SKETCH 2

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

pressure, the quality of artillery training fell off to such an extent that by late summer of 1950 men were thrown into combat with only a few days training or in some cases none at all. Many of these replacements had never fired a rifle and most had received no practical training with an artillery piece because of the North Korean Army's critical shortage of weapons and ammunition. Material shortages such as these and the concomitant inadequate artillery training program contributed greatly to a sharp decline in combat efficiency and morale in artillery units. Thus, one captured North Korean artillery officer states: "Artillery training and preparation were very poor, and even things learned could not be applied in action. For instance, although artillery men, we had no artillery; therefore the one month of artillery training that I received was quite useless." All in all it appears that while the comparatively well-trained personnel that formed the nucleus of North Korean artillery units prior to the invasion were capable of efficient performance of artillery missions when properly equipped, replacements for the artillery arm of North Korean combat units, recruited under the pressure of heavy war-time manpower requirements, were so inadequately trained as to play havoc with the combat effectiveness of North Korean artillery until the summer of 1951. (73)

B. Officer Training

The North Korean Army, following Soviet precepts, places primary emphasis on the training of officers. Whereas officers are given formal training at the various officer candidate schools and military academies of the North Korean Army, enlisted men receive the majority of their artillery training in the field with their units of assignment. The principal school training artillery officers for the North Korean Army prior to the expansion of training facilities incident to the invasion was the 1st Military Officers' Training School, originally located at TAEAN-NI (38°44'N-125°44'E) and recognized as the main North Korean military academy. Prerequisites for admittance are quite lenient and include an educational level equivalent to at least that of a primary school graduate, recommendation by the unit commander, and not less than 18 nor more than 45 years of age upon entry. Prior to enrollment in this school, all candidates receive two months of preliminary training which is followed by a regular training course of approximately 16 months. The pre-war curriculum was extensive and thorough with training conducted eight hours per day, six days per week. It consisted of 950 hours of general artillery instruction, 380 hours of artillery tactics, 400 hours of weapons training, 360 hours of topography, 92 hours of communications, 90 hours of engineering, 100 hours of Russian language instruction, 300 hours on the history of the communist party and 200 hours of infantry tactics. The 950 hours of general artillery instruction dealt primarily with the 76mm gun and 122mm howitzer and further broke down into 200 hours of ammunition training, 200 hours of ballistics, 300 hours of training utilizing

(73) TIS (ADV) 1251, 1607, 1778, 2511; KT 0228, 0370, 0468; AUFERG 2B-N-14, 23, 85, 94.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

the M-1927 quadrant sight and other fire control instruments, and 250 hours of range firing.

With the outbreak of hostilities, this training term was progressively shortened, in some instances to as little as five weeks, in response to the urgent need for artillery officer replacements. On or about 9 September 1950, the 1st Military Officers' Training School was transferred to TUNG-HUA (41°41'N-125°55'E), MANCHURIA because of UN advances into North KOREA. One month later, in October 1950, the school was redesignated as the KANG-KON Military Officers' Training School in honor of Lieutenant General KANG-KON who had been killed in action in September 1950. By 1 March 1951, this school had returned to KOREA and established itself at SAKCHU (40°24'N-125°02'E), where it was last identified on 14 June 1951. Under the close supervision of Soviet artillery officers, the school was staffed by North Korean instructors, many of whom had received their training at the Chinese Communist military academy in YENAN (36°36'N-109°27'E) or under fire in the Chinese Civil War. (74)

In addition to the 1st Military Officers' Training School, two other officer candidate schools at which artillery training was conducted had been established as early as December 1946. They were located at KOCHANG-NI (39°40'N-125°28'E) and at WANAM (41°42'N-129°41'E). A North Korean artillery captain captured in March 1951 indicates that the majority of company-grade officers now serving in North Korean artillery units were commissioned through these two officer candidate schools, while those above the rank of captain are for the most part, graduates of the 1st Military Officers' Training School. (75)

C. Artillery Ordnance Training

Although officers and men were generally segregated for artillery training, combined classes including all ranks were conducted at the P'yongyang Ordnance School in the repair and maintenance of artillery pieces. Instruction at this school was conducted by North Korean Army officers under the supervision of Soviet advisors. Most of the instructors of this school were drawn from among former graduates. The course of instruction includes the study of all artillery weapons and small arms organic to the North Korean Army, including the 122mm howitzer, 76mm gun, 76mm regimental howitzer, 45mm anti-tank gun, 120mm mortar and 82mm mortar and the repair and maintenance of these weapons. Technical information used in the course is obtained from translated Soviet ordnance texts. For familiarization purposes, captured US weapons are also available at the school. Periodic examinations are given to record each student's progress. In addition to their normal course of study, students at the ordnance school also receive brief instructions on other military subjects as well, notably the employment of the weapons that are covered during the course. North Korean ordnance personnel are unanimous in their opinion that the training administered at this school is

(74) KT 0228, 0370, 0468.

(75) TIS (ADV) 10, 771, 1088, 1271, 1607, 2603, 5039.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

perfunctory and inadequate, particularly in the technical aspects, and ascribe to that fact the unsatisfactory state of ordnance maintenance in the field. (76)

D. Enlisted Training

The training of personnel that were to form the original enlisted cadre of the first North Korean artillery units was commenced as early as August 1946. At that time training was conducted by various para-military organizations which hid their true military mission under such euphemistic names as "No. 1 Civilian Training Center" or "Peace Preservation Officers' Training Center". These designations cloaked an intensive military training program supervised by company-grade Soviet artillery officers. In September 1947, new Soviet artillery weapons began arriving in North Korea. By February 1948, when the 2d Unit of the Peace Preservation Officers' Training Center discarded its innocuous title concurrently with the official activation of the North Korean Army and became the North Korean 2d Division, it included a well trained and equipped artillery regiment. This pattern repeated itself identically in the other divisions that formed the nucleus of the infant North Korean Army.

With removal of the cloak of secrecy from the early formative stages of the North Korean military machine, it became apparent that while enlisted specialists, notably artillery signal personnel, in some instances attended formal courses of instruction in their specialty, enlisted artillery training on the whole was carried out under strict Soviet supervision by the company-grade officers within each unit. This unit training was more or less continuous up to the outbreak of hostilities and proceeded in training cycles of approximately five months' duration. Included in the training program were nomenclature and care of weapons, terrain evaluation, technique of fire and handling of ammunition. By March 1949 some of the original artillery units were engaged in observation and conduct of fire under field conditions. In July of the same year the core of well-trained artillery personnel developed through the intensive training program outlined above was broadened considerably by the arrival in North Korea of the 164th and 166th Divisions from the Chinese Communist Army. The personnel of these organizations were Koreans who had served with the communists in the Chinese Civil War. These battle-tested veterans, many of them with over three years of combat, were formed into the North Korean 5th and 6th Divisions and trained in the use of Soviet weapons and North Korean tactics. Similar transfers of Korean nationals from the Chinese Communist Forces took place with increasing frequency in the months just prior to the invasion and provided the enemy with an important source from which to draw a blooded and thoroughly trained cadre for the activation of new combat divisions. (77)

- (76) TIS (ADV) 1778.
(77) TIS (ADV) 519, 659, 777, 789, 899, 901, 960, 1088, 1102, 1123, 1161, 1212, 1271, 1405, 1420, 1430, 1468, 1508, 1510, 1790, 1900, 1988, 2012, 2255, 2635, 3183, 5039.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

March 1950 saw a feverish build-up of the North Korean Army and an intensification of the artillery training program. The cadre system was used extensively to provide a trained nucleus of leaders and instructors for newly-activated divisional artillery regiments, which were then brought up to full strength with draftees. These raw recruits were given approximately one month of basic training followed by two months of artillery or specialist training. The program included instruction in the operation, maintenance and repair of artillery weapons. Selected specialists received training on artillery fire control, observation, reconnaissance, communications and allied subjects. At the same time, those artillery units activated with the original divisions of the North Korean Army were putting the final polish on their training by engaging in field problems and combined maneuvers with the infantry. The speed-up in recruit training, however, marked the beginning of a period of progressive deterioration in the state of training of North Korean artillery personnel. (78)

When, with the start of the war, North Korean artillery units suffered increasingly heavier personnel losses, replacements recruited under pressure of the resultant heavy manpower requirements were thrown into combat with only a few days training or none at all. The desperate need for manpower not only necessitated a reduction of artillery training cycles to the barest minimum, but the concomitant shortage of artillery equipment also dictated that available weapons be used in combat rather than for training. As a result, instructors, in conducting classes on the various artillery weapons, were often forced to rely exclusively upon diagrams and pictures. The inferiority of this training resulted in a sharp decline in the morale of North Korean artillery personnel, as well as in severe losses of equipment. One artillery regiment, for instance, is reported to have lost the use of all but four or five of its radio sets through improper handling by untrained personnel. A corporal of the 10th Division Artillery Regiment, and a product of the speeded-up training program, makes the following typical comment indicative of the state of morale and training in his organization: "I think I was poorly trained. In fact, while admitting that I got artillery training, I was so poorly trained that I did not know exactly about measuring range and about dealing with intricate mechanisms." (79)

The rout of the North Korean Army in the autumn of 1950 completed the demoralization of the North Korean artillery arm. Since replacement weapons for those abandoned in the flight northward were not immediately forthcoming, many artillery men found themselves armed with rifles and cast in the role of infantry soldiers. It was not until late December 1950 that the enemy, probably in anticipation of the receipt of new artillery weapons

(78) TIS (ADV) 364, 771, 844, 890, 1016, 1087, 1088, 1102, 1106, 1146, 1160, 1164, 1417, 1468, 1624, 5039; KT 1146.

(79) TIS (ADV) 198, 771, 1087, 1093, 1251, 2511, 2622, 3008; KT 1145; AUFERG 2B-N-14.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

from the USSR, took effective steps to reorganize and retrain his artillery units. Key artillery personnel were ordered back from division to corps-controlled training centers for refresher courses lasting several weeks. Simultaneously, badly chewed up artillery units were consolidated to form new and effective organizations. In February 1951 unit training was recommenced at various corps training areas throughout North KOREA and by the end of May a system of rotating sub-units of division artillery regiments through these training centers had been inaugurated. Only since the first part of 1951 have there been indications of centralized training of artillery units at a level higher than division. This in itself seems to reflect a growing concern on the part of the North Korean High Command for the combat effectiveness of artillery units. (80)

6. ARTILLERY POTENTIAL AND EFFECTIVENESS OF NORTH KOREAN COMBAT UNITS

A. General

In order to acquire an appreciation of the current artillery support potential within major combat formations of the enemy, an analysis has been made of the organization, training and combat record of the organic artillery elements assigned to each formation. A historic treatment has been adopted in analyzing and presenting these factors to facilitate a meaningful interpretation of the results through their projection against the background history of the supported major combat unit. These combat units have been arranged by corps in accordance with the latest available North Korean order of battle lists. For further, more detailed, background information on the parent unit reference should be made to the series of division histories covering the North Korean 1st, 2d, 3d, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 12th, 13th, 15th and 105th Divisions that were prepared by ATIS, GHQ, FEC and published in Research Supplement, Interrogation Reports, North Korean Forces, Issues No. 1, 3 and 4 and in Research Supplement, Interrogation Reports, Issues No. 94, 96, 99, 100 and 104.

B. North Korean I Corps

(1) Corps Artillery

Comparatively late reports dating from June and July 1951 indicate that the North Korean I Corps, which then had its headquarters at KORANGP'O-RI (38°00'N-126°50'E), enjoyed the support of an artillery regiment that was probably equipped with 122mm guns. Antiaircraft protection for corps headquarters was allegedly furnished by an unknown number of 37mm antiaircraft guns and some antiaircraft machine guns assigned to a corps antiaircraft battalion. The I Corps artillery section at that time was under the command of Senior Colonel KANG-Pyong-Ch'an and included Colonel LEE-Ch'ung-Yol, the chief of staff of the artillery section, and Colonel

(80) TIS (ADV) 2826; 4047, 4074, 4079; KT 468, 703, 1044, 1074.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

HO-Song-Sok, the chief of the artillery tactics section.
(81)

(2) North Korean 8th Infantry Division.

When the 8th Division was activated at KANGHUNG (37°44'N-128°54'E) on about 8 July 1950 from the 1st Border Constabulary Brigade, its organic artillery support consisted of only one artillery battalion in place of the usual divisional artillery regiment. Furthermore, the antitank battalion and self-propelled gun battalion provided for by the T/O and E of the typical North Korean infantry division were both missing from the organizational line-up. The divisional artillery was not brought up to full strength until the middle of July, when two artillery battalions were transferred from the 10th Division. Although the addition of these units brought the divisional artillery up to full personnel strength, artillery weapons still remained far below the authorized amount at the time the division was committed for the first time in the battle for YECHEOM (36°40'N-128°25'E) on 19 July. (82)

Of the heavy losses in artillery personnel and weapons which the inexperienced 8th Division suffered in succeeding engagements at the hands of UN artillery and aircraft, the damage inflicted by an air attack during the battle of SINDOK-TONG (36°32'N-128°50'E) on 9 August was by far the most severe. In that attack the division lost eight 76mm guns, four 122mm howitzers and 12 trucks. A partial compensation occurred soon thereafter, when the unit received six 76mm guns, four 122mm howitzers, four trucks and about 50 replacements. (83)

After firing its last effective supporting mission of the summer campaign, during the five-day battle of H'ASAN-JONG (36°06'N-128°48'E), the divisional artillery became completely disorganized under the impact of the UN counteroffensive. All vehicles and artillery weapons of the division were either buried or simply abandoned through lack of fuel. During its reorganization and retraining phase in the YANGDOK (39°10'N-126°54'E) and CH'OSAN (40°50'N-105°45'E) Areas, the 8th Division received little artillery equipment and few weapons of heavier calibers, for when it reappeared in the combat zone at HAEJU (38°02'N-125°42'E) in the latter part of December as part of the North Korean I Corps, it was only equipped, insofar as artillery is concerned, with one 122mm howitzer, one 76mm field gun, one 45mm antitank gun and three 82mm mortars. (84)

While committed in the SEOUL (37°34'N-126°58'E) Sector and along the IMJIN River during the spring of 1951, as part of the I Corps, the division sustained considerable personnel casualties and lost a good portion of its scant artillery support, including the entire

(81) KT 381, 468, 994, 1128.

(82) TIS (ADV) 153, 154, 197, 1650, 1659, 1670, 1770, 1858.

(83) TIS (ADV) 154, 197, 475, 484, 507, 657, 920, 1468, 1858.

(84) TIS (ADV) 3483, 3506, 3705, 3708, 3787, 4283; KT 0074, 0456.

UNCLASSIFIED

46

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

regimental artillery of the 1st Rifle Regiment which was surrounded and completely annihilated on 19 February in the vicinity of K'ANGJU (37°28'N-127°10'E). Replacements for some of these losses were received prior to the May offensive, during which the 8th Division spearheaded the I Corps assault on SEOUL. At that time, according to a captured lieutenant colonel from the division political section, 13 82mm mortars, six 120mm mortars, 12 45mm antitank guns, 10 76mm field guns and four 122mm howitzers constituted the sum total of the artillery weapons at the disposal of the division. Colonel LEE-To-Bin was then the commander of the divisional artillery. Most of these weapons were concentrated at regimental level. In the 3d Regiment, for instance, the field artillery battery had a strength of five officers, 13 noncommissioned officers and 52 privates and was equipped with two 76mm field guns; the regimental mortar company had a strength of five officers, 19 noncommissioned officers and 39 privates and was equipped with three or four 120mm mortars; and the antitank company with a strength of five officers, 14 noncommissioned officers and 28 privates was armed with four or five 45mm antitank guns. Contrary to normal North Korean practice, all three units had been integrated into an artillery battalion under the command of the regimental artillery officer who was assisted by a staff of five officers and nine noncommissioned officers. The regimental artillery battalion also included a command platoon comprised of one officer, four noncommissioned officers and 11 privates. (85)

During the May offensive, the 8th Division, was badly mauled and forced to abandon a major portion of the available artillery weapons in its disorganized withdrawal. While the division was reorganizing and retraining during June in the vicinity of P'YONGSAN (38°16'N-126°26'E), artillery units were brought up to full strength through the integration of replacements from replacement regiments which were assigned to the I Corps and its subordinate units on 7 June. But artillery weapons remained scarce and were confined to a few 82mm mortars and antitank rifles in each rifle battalion. (86)

During the latter part of July, while policing the conference site at KAESONG (37°58'N-126°34'E), the 8th Division received a resupply of ammunition and a new complement of Soviet weapons and equipment designed to provide it with a full table of equipment. However, available reports fail to indicate whether all types and calibers of weapons were included and whether they were actually received in sufficient quantities to allocate to each unit its full equipment allowance. Indeed, one source indicates that only small arms and automatic weapons were issued. (87)

(3) North Korean 17th Mechanized Division

Upon its initial activation at P'YONGYANG

- (85) TIS (ADV) 3705, 3708, 3787, 4283; KT 0074, 0110, 0281, 0376, 0404, 0456, 0482, 0492.
- (86) KT 0110, 0376, 0482, 0923, 1112, 1128, 1129, 1169, 1197, 1214, 1276, 1305, 1466.
- (87) KT 0923, 1112, 1128, 1129, 1169, 1197, 1214, 1276, 1305, 1466.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

in the early part of August 1950, the 17th Mechanized Division, which had evolved from the 17th Mechanized Brigade, enjoyed the support of a self-propelled artillery battalion equipped with 16 SU-76 self-propelled guns, an antitank battalion armed with 12 45mm antitank guns and a field artillery battalion composed of two 76mm gun batteries and one 122mm howitzer battery. In addition, the two rifle regiments of the division were supported by the normal types and amounts of regimental and battalion artillery. The organic medium tank regiment contributed the support potential of the 76mm guns of its 40 to 60 (two or three battalions) T-34/76 tanks to the fire-power of the division. (88)

As a result of piecemeal commitment during the late summer months of 1950 (in support of the North Korean II Corps' assault on TAEGU (35°52'N-128°36'E) and in the defense of the Seoul - Inch'on (37°28'N-126°38'E) Complex against UN amphibious attack), artillery components of the 17th Mechanized Division acquired no experience in the delivery of coordinated fire support. Most armor and artillery not damaged by air attack en route to the front was lost to UN ground and air action in these piecemeal engagements. Only isolated remnants of the division artillery, stripped of all their artillery weapons, were able to effect a withdrawal north to SINUIJU (40°06'N-124°24'E) in the face of UN counter-offensive. (89)

When in mid-November the 17th Division was reorganized through the integration of new recruits and fillers, it retained its designation of a mechanized unit but was issued little armor and few artillery weapons. One source of questionable reliability states that while at SINUIJU the division received 20 T-34 tanks, 10 armored cars and some 82mm mortars from the USSR. However, this is not substantiated by other reports from that period, most of which indicate that the division derived its sole support from a few 82mm mortars assigned to the rifle battalions. (90)

Except for a few weeks of perfunctory basic instructions at SINUIJU, artillery personnel assigned to the reconstituted 17th Division were lacking in training and experience; shortly after the division was attached to the North Korean I Corps in the middle of January 1951 it was relegated to a service function in the corps rear area and saw no significant combat action. When on about 6 July the division rejoined other forward units of the I Corps in the HAEJU Area, it still had received no resupply of heavy equipment, although it retained its designation as a mechanized division. A limited amount of battalion artillery, such as two 82mm mortars, one 45mm antitank gun and four 14.5mm antitank rifles in one of the battalions of the 1st Rifle Regiment, a small amount of regimental artillery and possibly a few remaining armored vehicles represented the sum total of the

- (88) TIS (ADV) 932, 958, 992, 993, 1389, 1659, 1666, 1670, 1682, 1874, 1879, 1950, 1983, 2048, 2307.
- (89) TIS (ADV) 932, 958, 992, 993, 1389, 1659, 1666, 1670, 1682, 1874, 1879, 1950, 1983, 2048, 2307.
- (90) TIS (ADV) 3501, 3508, 3535, 3581, 3887, 4099, 4282; KT 0034.

UNCLASSIFIED

48

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

supporting weapons within the division at that time. However, one PW, a recent recruit of limited military experience, claims to have heard in June that the division was to receive some tanks and other heavier weapons and equipment from the USSR at an unknown date in the future. (91)

(4) North Korean 23d Infantry Division

To date only one prisoner, a deserter, has been captured from the 23d Division. According to this source, whose information appears coherent and reliable, the division had its origin in the 23d Infantry Brigade. When the brigade left its activation site at YONGWON (39°50'N-126°32'E) in mid-December 1950 to join the I Corps at HAEJU, its five battalions were not yet fully equipped. However, during the first part of February 1951 the brigade allegedly received its full allowance of equipment including presumably such smaller artillery weapons as were called for by the brigade structure. On 30 May the brigade was expanded into the 23d Division with the integration of fillers from the deactivated 36th Division and reorganized along the lines of the typical North Korean infantry division. On that occasion a large shipment of artillery pieces was received from corps headquarters, according to a hearsay report, and was assigned to the artillery regiment of the new division. (92)

(5) North Korean 47th Infantry Division

The 22d Artillery Regiment, which constitutes the organic artillery support of the 47th Division, was of normal strength and composition when activated at SINUIJU on about 1 October 1950. After assignment to the I Corps in late December, the division was committed in several bitter battles which seriously depleted its artillery support. By March 1951, when it participated in the defense of SEOUL, its serviceable artillery weapons had been reduced to a total of 18 76mm guns and 18 76mm howitzers. (93)

Deployment of the 47th Division in defensive positions along the IMJIN River during May and June resulted in further losses of artillery equipment due to UN ground and air action. Reports indicate that at that time only three 122mm howitzers and two 76mm guns remained in the divisional field artillery regiment, while the armament of the divisional antitank battalion had been reduced to five 45mm antitank guns and 10 14.5mm antitank rifles. The strength of this battalion had shrunk to 31 officers and 170 enlisted men and most of the small arms normally issued to these troops had been turned over to the rifle units of the division as replacement weapons. The artillery situation was considerably better in the rifle regiments: as of 9 May the 2d Regiment, for instance, retained four 120mm mortars in the regimental mortar company, three 76mm howitzers and one 76mm gun in the artillery battery and six 45mm antitank guns in the regimental antitank company. The

(91) KT 0034, 1016, 1034, 1065.

(92) KT 0754.

(93) TIS (ADV) 2393, 3302, 3357, 3579; KT 0076, 0205, 0295.

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

1st Battalion of that regiment was equipped at the time with two 82mm mortars, one 45mm antitank gun and five antitank rifles. (94)

On about 22 June the 47th Division together with other units of the I Corps was taken out of line and transferred to the Haeju Area, allegedly to be re-equipped and receive replacements. Although a number of replacements arrived in the latter part of June, no new artillery weapons or equipment had been received as of 5 August, the latest available date of information. (95)

C. North Korean II Corps

(1) Corps Artillery

When the North Korean II Corps was re-organized in the late fall of 1950, the corps artillery regiment which had been organic to the corps during the summer campaign of 1950 was apparently not reactivated due to an acute and universal shortage of all types of artillery weapons. Upon commitment in the communist New Year's Eve offensive, the corps was still lacking in any artillery reserve. In March 1951, according to a seemingly competent source, an antiaircraft regiment organized and trained in MANCHURIA was assigned to the corps. The regiment was comprised to three identical battalions each of which consisted of two antiaircraft gun batteries, one antiaircraft machine gun battery and a command platoon; each had a total strength of approximately 420 officers and enlisted men. Each of the gun batteries had a strength of around 100 officers and men and was equipped with four 37mm M-1939 antiaircraft guns while the machine gun battery was armed with 18 12.7mm Dshk M-1938 antiaircraft machine guns but had the same strength as the gun batteries. The battalion was furthermore equipped with eight trucks which were employed as prime movers for the antiaircraft guns. Shortages in communication and fire control equipment ostensibly limited the effectiveness of this unit. The regiment was deployed in the corps rear area to secure the P'yonggang (38°24'N-127°18'E) Airfield and other important military targets against UN air attacks and was still assigned to the corps at the time of the source's capture in the middle of June. (96)

An exceedingly well informed North Korean artillery officer reports that the II Corps received a new issue of artillery weapons from the USSR during the latter part of May. Each division in the corps was allegedly issued the following artillery pieces: 12 122mm howitzers, 12 76mm field guns, 12 76mm howitzers, 18 120mm mortars, 81 82mm mortars and 48 45mm antitank guns. However, instead of being assigned directly to the divisions, a large portion of this armament remained with the corps artillery reserve. Concurrently with the receipt of these weapons, an intensive training program was inaugurated for all artillery personnel, most of whom were without any prior artillery experience or training. This

(94) KT 0455, 0487, 0499, 0598, 0794.

(95) KT 1089, 1307.

(96) TIS (ADV) 2909; KT 0223, 0593.

UNCLASSIFIED

50

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

same PW claims that at the time of his defection in June 1951, Major General KIM-II was the artillery officer of II Corps. His staff included Colonel KWON-Chin-Su, the artillery section chief of staff, and Lieutenant Colonel LEE-Chong-Sun, the tactical planning (operations) officer of the corps artillery section. While this report has not been entirely confirmed, it indicates, if true, that artillery elements of the II Corps have achieved a combat effectiveness and level of armament which compares favorably with the artillery potential at the time of the initial invasion. (97)

(2) North Korean 2d Infantry Division

Artillery elements as well as other subordinate units of the 2d Division had already completed several years of intensive training under a cloak of secrecy when the division was officially activated at NANAM (41°42'N-129°41'E) in February 1948. The artillery arm of the newly-constituted division was comparable in structure to that of the typical North Korean infantry division; but although Soviet artillery weapons had arrived intermittently since September 1947 at the activation site, artillery units had not yet received their full complement of weapons and equipment. After over two years of continuous training at NANAM and HAMHUNG (39°54'N-127°32'E), the division artillery together with other elements of the division departed on 12 June 1950 for its assembly area along the 38th Parallel via YANGGU (38°06'N-128°00'E), where it was fully equipped with new Soviet artillery pieces. (98)

In its first supporting action during the battle of CH'UNCH'ON (37°52'N-127°44'E) on 26 and 27 June 1950, accurate ROK counterbattery fire caused the destruction of around seven of the division's 16 SU-76 self-propelled guns, two 45mm antitank guns and a number of mortars of all types. After crossing the HAN River at ICH'ON (37°16'N-127°26'E), which resulted in further losses of mortars and heavier artillery weapons, the division found it increasingly difficult to secure resupplies of ammunition and equipment. When on 31 August the artillery laid a preparatory barrage on the western bank of the NAKTONG River opposite PUGONG-NI (35°30'N-128°24'E) in support of the division's assault across the river, its strength had been further sapped by UN air attacks and counterbattery fire. In the 3d Battalion, for instance, only four 76mm guns and three 122mm howitzers remained. In the precipitate withdrawal of the division from its Naktong Bridgehead on 17 September and subsequent headlong retreat northward, all remaining artillery pieces were either buried or abandoned to UN Forces. An analysis of PW interrogation reports reveals that between 25 June and 25 September the 2d Division suffered the loss of some 70 conventional artillery pieces of all types in addition to 30 45mm antitank guns. The high rate of attrition prevalent among artillery units of the division is well illustrated by the self-propelled gun battalion which suffered 75% casualties.

(97) KT 0468, 0564, 0757.

(98) TIS (ADV) 52, 69, 71, 75, 612, 777, 899, 901, 921, 1253, 1451, 1468, 1826, 2235.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

among its personnel and lost 90% of its guns. (99)

After reorganization of the 2d Division at KANGGYE (40°58'N-126°34'E) during November, divisional artillery units were under-strength both in weapons and equipment. Consequently, the training program to which the divisional troops were subjected at KANGGYE stressed the employment of man-power to compensate for the lack of heavier supporting weapons. When on about 28 December the 2d Division joined the North Korean II Corps in the Hwach'on (38°06'N-127°42'E) Sector in order to participate in the flanking effort that had been assigned II Corps in the forthcoming offensive, the divisional artillery regiment, though having a strength of around 450 officers and men, was devoid of all artillery weapons. Even organic artillery within the rifle regiments was highly limited and was confined to two or three 82mm mortars and an equal number of captured 2.36-inch US rocket launchers in each rifle battalion. This absence of all heavier supporting weapons, including 120mm mortars and regimental 76mm howitzers, probably finds its explanation in the fact that the 2d Division together with the 10th Division and other elements of the corps had been assigned a guerrilla mission. In the accomplishment of this mission the division had to infiltrate through UN lines and confine its movements to mountain trails which precluded the transport of normal artillery weapons. (100)

In the subsequent bitter battles of attrition with UN Forces, artillery units of the 2d Division sustained heavy casualties and suffered the loss of some of the few supporting weapons available at battalion level. Those artillery units that had retained some semblance of cohesion and succeeded in reaching the II Corps assembly area in the vicinity of HOEYANG (38°42'N-127°36'E) were subjected to a thorough reorganization. While training in this area from mid-March to mid-May 1951, the divisional artillery units as well as other elements of the 2d Division were brought up to strength through the integration of replacements. During this time, too, limited quantities of artillery pieces were received including, according to one PW, 120mm Soviet-type mortars that were manufactured in P'YONGYANG. The North Korean version of this mortar allegedly differentiates itself from its Soviet counterpart in that the former bears no factory marking and is fitted with a base-plate and with a traversing and elevating mechanism which resembles that of the 82mm Soviet mortar. It is said to have a maximum range of approximately 6,270 yd (5,700 meters) which is practically identical to that of the Soviet mortar. (101)

When the 2d Division had completed its reorganization and retraining in May and was committed in the renewed communist offensive effort, the so-called 2d Impulse of the Fifth Phase Offensive, it enjoyed a

- (99) TIS (ADV) 50, 52, 71, 999, 1210, 1226, 1233, 1253, 1468, 1709, 1741, 1782, 1826, 1978, 2311, 3223.
- (100) TIS (ADV) 2954, 3084, 3202, 3217, 3220, 3223, 3315, 3343, 3391, 3633, 3693, 3756, 4065.
- (101) KT 0141, 0223, 0393, 0399, 0414, 0757, 0830.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

greater artillery support potential than at any time since its reconstitution, although still below T/O and E requirements. The divisional artillery regiment was equipped with five 122mm howitzers and between four and six 76mm field guns and had a strength of approximately 800 men. The antitank battalion had increased its armament to around eight 45mm antitank guns. Within the rifle regiments the supporting fire delivered by a limited number of 120mm mortars could be supplemented by a considerable amount of battalion artillery (which in the typical rifle battalion averaged about five 82mm mortars, two 45mm antitank guns, four or five antitank rifles and occasionally some captured US rocket launchers). But communications equipment was still in short supply and limited the effectiveness of divisional artillery units. This is illustrated by the following excerpt from the interrogation of a PW from one of the battalion mortar companies of the 2d Division: "The forward observer, who is usually the company commander, takes one man forward to be a runner because no communication facilities are available. When the Observer sighted the enemy position, he gave the coordinates to the runner, and the runner in turn relayed them to men stationed within hearing distance on down to the platoon leaders." Mortar personnel of the division had by this time acquired a certain degree of proficiency and learned to reduce equipment losses by properly emplacing and camouflaging their weapons. One PW from this division states, for instance, that as a rule the 82mm mortars of his company were positioned in emplacements measuring approximately 8 ft in diameter and 8 inches in depth; the positions were carefully camouflaged with fresh branches. The mortars are normally located approximately 500 yd to the rear of the forward infantry positions, it is claimed, with a distance of around 25 ft separating individual emplacements. Usually the basic ammunition load for each weapon, which averages about 80 rounds, is stacked up in a pile approximately 35 ft behind the emplacement. To solve the ammunition problem captured ammunition for US 81mm mortars was allegedly used interchangeably with Soviet ammunition for the 82mm mortar. (102)

Considerable personnel casualties and losses of artillery equipment were sustained in the May offensive which carried the 2d Division to the gates of HAJINBU-RI (37°38'N-123°34'E). When in late May and early June the division was forced to withdraw to the Inje (38°04'N-128°10'E) Area under strong UN pressure, further significant artillery losses were inflicted by particularly effective and accurate UN artillery fire. With the tactical situation more or less stabilized, the division, while fighting a defensive action in the Inje Sector for the next few months, found time to reorganize its artillery units and bring them up to T/O strength through the integration of replacements. At the same time the rifle regiments apparently received a limited amount of artillery, including 76mm regimental howitzers or field guns, and 120mm and 82mm mortars, so that by mid-August, the latest available date of identification regimental and battalion artillery units were approaching,

(102) KT 0141, 0223, 0339, 0393, 0394, 0399, 0527, 0658, 0660, 0884.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

but had not yet reached, full strength in personnel as well as equipment. Supplies of artillery ammunition, too, seem to have been adequate by August, for one PW captured during that period reports that his mortar company had 300 rounds of mortar ammunition on hand, while another prisoner pegs the ammunition supply of his mortar company at 1,000 rounds. However, a good part of this ammunition apparently was defective; according to one source, 20% of the mortar ammunition had bad primers and 30% were duds. (103)

Meanwhile the divisional artillery regiment was detached from the division during the latter part of May and assigned to an artillery training center at HOEYANG for a three-month artillery course designed to train the new replacements and raise the combat efficiency of the regiment prior to the arrival of a full complement of Soviet artillery weapons. When the 1st Battalion of that regiment reverted back to the 2d Division in mid-August, it had a total strength of 250 officers and men organized into a headquarters battery and two artillery batteries. For reasons that are as yet not entirely clear, the other battery of that battalion as well as the 2d and 3d Battalions of the artillery regiment continued training at HOEYANG. The headquarters battery of the 1st Battalion was comprised of a reconnaissance platoon and a signal platoon equipped with three field telephones and two transceivers. The 1st Battery was equipped with four 122mm M-1938 howitzers and the 2d Battery with four 76mm M-1942 guns. Soviet ZIS-151 trucks organic to each battery were employed as prime movers for these weapons. A captured member of this battalion again exemplified the improved security measures that North Korean commanders have adopted to protect their weapons from damage by UN ground and air action; this source reports that the artillery pieces of the battalion were emplaced by battery in bunker-type emplacements separated by a distance of 60 ft in case of the 122mm howitzer and 30 ft in that of the 76mm gun. Ammunition was stored in slit trenches constructed at a distance of about 12 ft from the emplacement, while the prime movers were secured far in the rear except when used as supply trucks. In spite of these improvements in the general artillery situation, maintenance facilities, according to the source just quoted, are still nonexistent in forward areas; consequently, commanders stress the need for first-echelon maintenance. (104)

(3) North Korean 13th Infantry Division

Organized along the lines of the typical North Korean infantry division, the artillery components of the 13th Infantry Division did not draw their full complement of artillery weapons until 15 June 1950, three months after the activation of the division at SINUIJU. Like the rest of the division, the divisional artillery crossed the 38th Parallel on 26 June at full T/O and E strength. In the engagements that followed

- (103) KT 0393, 0394, 0399, 0400, 0414, 0447, 0590, 0658, 0660, 0757, 1087, 1247, 1262, 1265, 1269, 1290, 1357, 1365, 1611.
 (104) KT 1022, 1247, 1322, 1357, 1472.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

commitment of the division, the effectiveness of the supporting artillery was progressively reduced by losses of artillery weapons and personnel casualties inflicted by UN counterbattery fire and air action and by an increasing shortage of ammunition and communications equipment which began to be severely felt in the early part of August. By 22 August the original armament of the artillery regiment had been reduced to 13 76mm field guns and nine 122mm howitzers and its strength had declined to around 900 officers and men. During the UN counteroffensive in September artillery elements of the division became completely disorganized and all artillery weapons that had not been destroyed were abandoned. (105)

From November 1950 until February 1951 the artillery regiment of the 13th Division was reconstituted and retrained in MANCHURIA. Dummy artillery pieces were employed initially in this training until regular weapons became available in January. At that time the regiment is reported to have received 30 76mm and six 122mm artillery pieces plus a total of 3,900 rounds of ammunition for these weapons. Upon the departure of the artillery regiment from its training site in February six 2½-ton trucks and 30 1½-ton trucks were issued as prime movers. In March the regiment rejoined the rest of the division at SINANJUNG-RI (38°38'N-127°42'E). (106)

During April, after the 13th Division had joined the II Corps, the most serviceable artillery pieces and trucks and 50% of the ammunition supply in the hands of the division artillery were transferred to the 1st Battalion of the artillery regiment, which was then attached directly to the artillery section of II Corps as a temporary artillery reserve. The battalion was subsequently committed in support of the corps offensive effort in the Inje Sector. Meanwhile the 2d and 3d Battalions of the 13th Division artillery regiment received further combat training near KUMGANGWON-NI (38°40'N-128°00'E) and as of the middle of August, the latest available information, had not yet seen any combat. PsW from the 1st Battalion indicate that the accuracy of the supporting fire delivered by that unit left much to be desired due to shortages of proper fire control equipment. Since forward observers were issued only binoculars to determine range and distance, it was generally necessary to fire nine or 10 rounds before the target had been zeroed in. However, by the middle of summer, ammunition resupply apparently no longer presented a serious problem to the enemy, for one of the captured members of this unit states that by August the 1st Battalion received 150 to 200 rounds of artillery ammunition every third or fourth day. (107)

Some artillery was also available within the rifle regiments of the 13th Division. Reports dating

(105) TIS (ADV) 771, 787, 804, 890, 895, 1016, 1193, 1202, 1237, 1409, 1468, 1582, 1919, 2004.

(106) KT 0066, 0228, 0236, 0238, 0318, 0319, 0325, 0326, 0389, 0550, 0714, 0715, 0852, 0995, 1025.

(107) KT 0236, 0318, 0319, 0325, 0326, 0389, 0550, 0714, 0715, 0852, 0995, 1025, 1042, 1374, 1464.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

from the period April to June 1951 indicate that each infantry regiment averaged approximately 12 82mm mortars, 18 14.5mm antitank rifles, some 76mm regimental howitzers and a varying number of 45mm antitank guns, which were often employed as direct support weapons. (108)

(4) North Korean 27th Division

When the 27th Division was organized in the Yangdok (39°10'N-126°54'E) Area, it was patterned after the typical North Korean Infantry Division in its organizational structure, except that the divisional artillery regiment was missing. Upon assignment to the North Korean II Corps just prior to the communist January offensive, the division's only artillery support came from a small number of battalion artillery weapons which in the typical battalion averaged two or three mortars and an equal number of 14.5mm antitank rifles. Since Soviet 82mm mortars were in short supply, they had been supplemented by captured US 60mm and 81mm mortars; consequently, the division relied largely on captured US mortar ammunition. Following the bloody defeat of the division at the gates of WONJU (37°20'N-127°56'E) during the first week of January 1951, the artillery situation became even more acute. One officer reports, for instance, that on 5 February two mortars for which there was no ammunition constituted the entire artillery support with his regiment. However, by the end of that month the division had succeeded in withdrawing to the Hajinbu-Ri (37°38'N-128°34'E) Area and some replacement mortars together with a limited amount of mortar ammunition became available. Still the division derived its only indirect fire support from mortar-type weapons of low combat efficiency. Mortar company commanders had to rely on runners for communications and the transmission of firing data. Furthermore, firing was very inaccurate, since mortar sights were not available. (109)

While the 27th Division was reorganizing and retraining in the vicinity of HOEYANG from mid-March to mid-May of this year, battalion and regimental artillery units were brought up to strength through the integration of replacements. A limited amount of smaller artillery weapons, including 14.5mm antitank rifles, 82mm and 120mm mortars and possibly a few 76mm guns, were also issued at this time, together with adequate ammunition. When the division was put back on line to participate in the May offensive, it still had only the support of its underequipped battalion and regimental artillery and consequently sustained crippling casualties and equipment losses at the hands of the ROK Capital Division in the Sorek-San (38°07'N-128°00'E) Sector. While withdrawing to the Yanggu (38°06'N-128°00'E) Area in the face of the UN counteroffensive that followed this engagement, the division for the first time received the support of its artillery regiment. The regiment was activated at KANGSO (38°58'N-125°28'E) in February 1951,

(108) KT 0714, 0715, 0852, 0995, 1025, 1042, 1374, 1464.

(109) TIS (ADV) 2876, 2879, 2996, 3104, 3187, 3304, 3455, 3630, 3634, 4066, 4128, 4136, 4141, 4287.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

possibly from elements of the deactivated 38th Division, and trained at its activation site until mid-April. At that time the regimental headquarters was transferred to HOBYANG together with the 1st and 2d Artillery Battalions, while the 3d Battalion was sent either to WONSAN (39°10'N-127°26'E) or HUNGNAM (39°48'N-127°30'E) to perform security duties on the east coast. At HOBYANG the artillery regiment apparently continued its training until it joined the rest of the 27th Division in the early part of June. (110)

At that time the newly-acquired field artillery regiment of the 27th Division, which carried the code designation 407th Unit, was commanded by Lieutenant Colonel or Colonel KIM-Ki-Ho. Its personnel and equipment strength was normal; however, interrogation reports indicate that certain substitutions had been effected in the types of artillery equipment issued to this unit. The 1st Artillery Battalion, with a strength of around 30 officers and 180 enlisted men, was equipped with four 122mm M-1938 howitzers and eight 76mm M-1942 field guns; the equipment of the 2d Battalion consisted of 12 76mm field guns; while the 3d Battalion, which was still stationed in the Wonsan - Hungnam Sector, was allegedly armed with 12 76mm M-1938 mountain guns. In addition, each battalion was equipped with approximately 12 trucks (GAZ-51 2½-ton trucks and captured US 1½-ton and 3/4-ton trucks in case of the 1st Battalion) and a considerable amount of signal equipment, including two 13-R wireless sets, 12 field telephones, one switchboard and ample quantities of field wire. Further signal equipment, including five REM transceivers, one switchboard and eight field telephones, was found in the regimental signal section. The regiment, consequently, had at its disposal a communications potential which, according to North Korean standards, should be rated as exceptional. This signal equipment was employed in accordance with normal enemy practice: telephones served to maintain communications within administrative circuits, while wireless equipment was reserved for use in fire-control nets. (111)

The divisional field artillery found immediate employment upon joining its parent organization. In its nightly fire missions supporting the division's defensive effort, the artillery regiment expended on an average of 80 to 100 rounds of artillery ammunition per night. This ammunition consumption by the divisional artillery, coupled with reports of increased ammunition expenditure and resupply within regimental and battalion artillery units, show clearly that the ammunition supply problem in the 27th Division had largely been solved by the latter part of June. Limited amounts of replacement artillery pieces, including mortars and some 76mm M-1902/30 guns, were also received by the division during July and August and were assigned to the rifle regiments. As a result, regimental and battalion artillery units began to approach full table of equipment allow-

(110) KT 0222, 0315, 0320, 0342, 0346, 0388, 0483,

0533, 0565, 0946, 1036, 1044, 1091.

(111) KT 0946, 1036, 1044, 1091.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

ances by mid-August. Thus, most rifle battalions averaged from four to six 82mm mortars, two 45mm antitank guns and a few antitank rifles; infantry regiments were equipped with up to four 76mm guns. But few 120mm mortars have been reported during that period. The enemy attempted to protect his improved supply of artillery weapons by emplacing his artillery pieces in well-camouflaged earth-and-timber pillboxes; however, these attempts were only moderately successful, for enemy prisoners from the 27th Division credit UN artillery fire with excellent accuracy and claim that it inflicted heavy personnel casualties and damage to artillery weapons. Between 20 June and 1 July, for instance, one 122mm howitzer and eight 76mm guns plus an undetermined amount of regimental and battalion artillery were lost to UN artillery fire. Nevertheless, replacements of artillery equipment partially compensated for this loss and when the division was last identified in the Pia-ri (38°16'N-128°02'E) Area on 11 September 1951, the effectiveness of its artillery support, by virtue of excellent communications, an adequate supply of artillery ammunition and the thorough training of divisional artillery personnel, deserved a high evaluation in comparison with other North Korean combat units. (112)

D. North Korean III Corps

(1) Corps Artillery

Upon reorganization of the North Korean III Corps in the Kanggye Area during late fall of 1950, an artillery regiment constituted the corps artillery reserve. This regiment was equipped with a mixture of artillery pieces, including, according to one source, three 122mm M-1938 howitzers, seven medium-caliber antitank guns and 10 45mm antitank guns; these weapons had presumably been salvaged from the North Korean Army's defeat in the south. Since the artillery regiment, being roadbound, lagged behind the foot troops in the movement from the reorganization site to the front, the III Corps was committed in the P'yongch'ang (37°22'N-128°42'E) Sector during February 1951 without support from its artillery reserve. (113)

From that time until the present, information regarding the corps artillery regiment has been scattered and highly fragmentary. Several references indicate that during the spring of this year, elements of the III Corps, including possibly the corps artillery regiment, underwent artillery training in the Inje Area. In late spring, according to an unconfirmed though seemingly well-informed source, the III Corps is supposed to have received a full complement of artillery weapons for each of its subordinate divisions. Only a portion of these weapons was issued to the divisions, while the bulk was held in reserve at a corps artillery training center in the vicinity of HOEYANG, where artillery units from each division of the corps were sent in relays for

(112) KT 0388, 0444, 0946, 0951, 1021, 1027, 1031, 1036, 1044, 1091, 1105, 1124, 1134, 1346, 1478, 1510, 1587, 1678.

(113) TIS (ADV) 4293.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

an intensive training course. This account suggests that the corps artillery reserve may have been augmented at this time by the transfer to corps on a permanent basis of some of the divisional artillery units. The corps artillery section, according to the same source, was of normal structure and included Colonel HAN-Kuk-Chin, the chief of staff of the section, a tactical planning section under Lieutenant Colonel LEE-Chi-Chung and a reconnaissance section under Major LEE-Kye-Lim. (114)

No further information is available on the artillery potential of III Corps until the early part of September, when prisoners from the 45th Division indicated that the corps artillery reserve consisted of an artillery regiment which supported their division in a limited counterattack against an objective in the Ipo-ri (38°26'N-128°06'E) Sector. The regiment seems to have been equipped with around 12 76mm field guns and an undetermined number of larger pieces. According to a rumor heard by one of the PSW, the corps was to receive an additional 100 artillery pieces "in the near future." Most sources concur that the ammunition supply problem had largely been solved in the III Corps by this time and that ample quantities of ammunition for corps as well as division artillery weapons had been stock-piled in the corps ammunition dump. This is illustrated by the fact that the corps artillery regiment apparently was able to fire between 1,000 and 2,000 rounds of preparatory fire in support of the 45th Division. While it is probable, therefore, that the North Korean III Corps currently has an artillery reserve of regimental strength, the composition and equipment of that reserve has not been definitely determined, although indications are that it is not yet fully equipped. The combat effectiveness of that reserve, in spite of an adequate ammunition supply and protracted period of training, must remain doubtful since it is lacking in combat experience. (115)

(2) North Korean 1st Infantry Division

Students attending a two-month artillery course at the No. 1 Civilian Training Center at KAECH'ON (39°40'N-125°38'E) furnished the cadre for the divisional artillery when the North Korean 1st Division was activated in late 1946. From this time until the division began to move into advanced attack positions along the 38th Parallel in the vicinity of SONGHYON-MI (38°04'N-126°28'E) in June 1950, divisional artillery units were subjected to a continuous program of intensive training under the supervision of Soviet military advisors. As a result, the initial attack of the division on 25 June down the vital Kaesong (37°58'N-126°34'E) - Seoul Axis was supported by a well-trained artillery arm of normal strength, structure and equipped with a full complement of Soviet weapons. Heavy UN artillery fire encountered during the assault on SEOUL caused considerable damage to artillery equipment and by the end of the first week of the campaign the division had lost one 122mm howitzer and three 76mm guns. Commitment of the

(114) TIS (ADV) 3073, 4047, 4286; KT 0044, 0062, 0468.

(115) KT 0512, 1468, 1485, 1562, 1631, 1652, 1834, 1881, 1914.

UNCLASSIFIED

UNCLASSIFIED

self-propelled gun battalion on 13 July at MUN'YONG (36° 44'N-128°06'E), where the division fought its first major engagement, resulted in the destruction of five SU-76 self-propelled mounts and the further loss of a large number of artillery pieces. The rate of attrition of artillery weapons continued to be high throughout the summer campaign as the 1st Division carried one of the main efforts in the North Korean Army's assault on TARGU. Equipment losses became particularly prohibitive during the last desperate stages of that assault from late August to mid-September. By this time the artillery weapons in the hands of the division had been reduced to eight SU-76 self-propelled guns, six 122mm howitzers, seven 45mm antitank guns and a small number of 76mm guns and regimental howitzers. These remaining artillery pieces, too, were either abandoned or destroyed when the division began to retreat in disorder on about 19 September under the impact of the UN counteroffensive. (116)

When the 1st Division was reconstituted in the Kanggye - Manp'ojin (41°10'N-126°18'E) Area during late October and November, it retained the normal artillery structure of the typical North Korean infantry division. But aside from a few mortars and antitank rifles assigned to the rifle regiments, artillery weapons were altogether absent. Upon departure of the division from its reorganization site during the first week of December, the state of training of the divisional artillery units, due to the absence of weapons and the lack of qualified instructors, left much to be desired. Consequently, the artillery regiment of the division was sent back to a training center in the vicinity of KUMSONG (38°25'N-127°36'E) during the first part of February 1951 for further intensive training, while the division conducted its combat operations in the P'yongch'ang Sector under the still highly-limited support of its regimental and battalion artillery. While a few Soviet artillery pieces were apparently received during the early part of spring, the artillery weapons at these echelons still remained in critically short supply. The average battalion at that time possessed from three to six 14.5mm antitank rifles and around three or four 82mm mortars or captured US 60mm mortars, while the regiments had a few isolated 76mm guns or howitzers and one or two 45mm antitank guns. A critical shortage of ammunition that prevailed in the division during the spring of 1951 further emphasized the inadequacy of the artillery support. Although a few artillery weapons, including three 122mm howitzers, were received from the USSR around 1 April, their number was too few to effect the artillery situation materially. (117)

Concurrently with the relief of the 1st Division in late April or early May and its transfer to the T'ongch'on (38°54'N-127°54'E) Area, the divisional artillery regiment left KUMSONG in order to join the rest

- (116) TIS (ADV) 41, 129, 158, 295, 374, 404, 405, 771, 797, 852, 1149, 1283, 1285, 1385, 1405, 1420, 1426, 1430, 1468.
 (117) TIS (ADV) 2525, 2900, 2947, 2949, 3101, 3747, 3785, 3854, 3875, 3997, 4052, 4068, 4166; KT 0037, 0303, 1631.

UNCLASSIFIED

of the division at its new station. While the division trained in this area and performed a coastal security mission, the artillery units at all echelons were brought up to strength through the assignment of replacement personnel and were issued sufficient quantities of new artillery weapons to bring them close to their full T/E allowances. In the middle of August adequate amounts of ammunition for these weapons were issued and on 23 August the division, this time accompanied by its artillery regiment, departed T'ONGCH'ON to relieve elements of the II Corps in the Ip'o-ri Sector. Most prisoners captured upon recommitment of the division in early September concur that regimental and battalion artillery units had reached almost full strength in personnel as well as equipment; the average rifle battalion was allegedly equipped with about nine 82mm mortars and six 14.5mm antitank rifles, while the regimental artillery included three or four 76mm guns or howitzers, some 45mm antitank guns and around six 120mm mortars. However, the two 45mm guns found in the battalion antitank platoon of the typical North Korean infantry division had apparently not been re-issued. At division level, on the other hand, artillery support still fell short of T/O and E requirements, according to the best evidence available. It probably included approximately six 122mm howitzers, 12 76mm field guns, 10 45mm antitank guns and possibly some 120mm mortars. However, it is not unlikely that the artillery support potential of the 1st Division may have been improved in the meantime, for a PW captured on 3 September claims to have heard from his unit commander that the III Corps was to receive an additional 100 artillery pieces "in the near future." (118)

(3) North Korean 15th Infantry Division

Artillery units of the North Korean 15th Infantry Division were activated at NAJIN (42°15'N-130°18'E) simultaneously with the rest of the division during the rapid build-up which the North Korean Army experienced in the weeks immediately preceding the invasion. Members of the divisional artillery received their training from March through the first part of June 1950 at the so-called Special Training Branch of the Civilian Youth Training Center at NAJIN. In May and June artillery pieces began to arrive directly from the USSR and when the 15th Division departed for staging areas near KUMHWA (38°18'N-127°29'E) on about 20 June, it was accompanied by an artillery arm of normal strength, composition and equipment. (119)

Because of the relatively short and superficial training of its artillery personnel, the division suffered the loss of considerable quantities of artillery equipment in the course of its southward advance on the central front. The rate of attrition was particularly high in the self-propelled gun battalion which in one attack by UN aircraft on 5 August lost eight SU-76

- (118) KT 1512, 1525, 1533, 1556, 1559, 1560, 1579, 1609, 1610, 1612, 1631, 1652, 1740, 1741, 1745.
 (119) TIS (ADV) 1076, 1077, 1081, 1085, 1088, 1093, 1101, 1102, 1161.

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

guns. Nevertheless, when the divisional artillery was committed in support of the division in the all-out assault on YONGCH'ON (35°58'N-128°57'E) on 2 September, it was still capable of delivering effective supporting fire until all ammunition supplies on hand had been exhausted. During the engagement, accurate UN counterbattery fire inflicted heavy casualties among artillery personnel and knocked out a good part of the remaining artillery pieces. Inexperience and overconfidence of artillery personnel and commanders in the 15th Division became particularly apparent in this operation, for the supporting artillery was emplaced too far forward and was consequently separated from the rest of the division by a UN counterattack. As a result, the divisional artillery commander was killed and all remaining artillery weapons were either destroyed or captured. (120)

In the reorganization which followed its headlong and disorderly retreat to TOKCH'ON (39°46'N-126°18'E) in early October, the 15th Division retained the organizational pattern of the typical North Korean infantry division, including an artillery arm of normal structure. But while the divisional artillery units were brought up to almost full strength, they were almost entirely lacking in artillery weapons. The division was only issued a few mortars (without ammunition) that had been salvaged in the almost complete disintegration of the North Korean Army. After the division joined the III Corps in the Kanggye Area in November, additional mortars as well as a few heavier artillery weapons were received from MANCHURIA and when it began its march south on about 6 December, the divisional artillery regiment had reached a strength of around 1,200 officers and men and was equipped with seven 76mm field guns and three 45mm antitank guns, all of them ox-drawn. All elements of the division, including the artillery regiment, received further training in the Inje Area from late December until mid-February. Some mortar and small arms ammunition was also issued during that period. (121)

When the Division was committed in the P'yongch'ang Sector in late February 1951, the divisional artillery regiment, which was still under-equipped and insufficiently trained, continued its training in the vicinity of INJE. Consequently, infantry units of the division had only the support of their own organic battalion and regimental artillery. However, the artillery units at these echelons, although still lacking a major part of their T/E weapons, were better equipped at the time than their counterparts in most other North Korean divisions. The typical regiment possessed from three to five 120mm mortars, one or two 45mm antitank guns and a few 76mm regimental howitzers, while the average battalion was equipped with from five to eight 82mm mortars and up to nine 14.5mm antitank rifles. But in the 15th, as in other divisions of the North Korean Army, the shortage of artillery ammunition remained critical. (122)

- (120) TIS (ADV) 1076, 1088, 1101, 1102, 1161.
(121) TIS (ADV) 3107, 3801, 3804, 3807, 3880, 3948, 4047; KT 1668.
(122) TIS (ADV) 3804, 3807, 3872, 3879, 3948, 4047, 4286; KT 0591, 0747, 1668.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

The artillery situation at battalion and regimental level remained essentially static while the 15th Division was committed intermittently on the eastern front during April, June and July, except that one battery from the divisional field artillery regiment equipped with four 76mm field guns was attached to the combat echelon of the division in late April. Meanwhile the rest of the artillery regiment moved to KUMSONG (38°25'N-127°36'E) sometime in April to be issued the artillery weapons which it was still lacking and for further training. From there the 3d Artillery Battalion received further marching orders directing it to proceed to SINUIJU, while elements of the 1st Battalion were sent to P'YONGYANG. The reason behind these movements has not been entirely clarified; but one apparently well-informed PW avers that at their destinations the units involved were to secure the remainder of the organizational equipment for themselves and the rest of the regiment. (123)

In any event, the 15th Division was reunited with its artillery regiment in the vicinity of MARHWI-RI (38°38'N-127°59'E) during the middle of August. While assembled in this area for rest, reorganization and retraining, artillery units, like all other elements of the division, received replacements to bring them up to full strength and, except for the artillery regiment which was already fully equipped, were issued sufficient new weapons to bring them close to their full allowance of equipment. The 50th Regiment, for instance, received five 76mm field guns, nine antitank guns and 18 82mm mortars at that time. Adequate quantities of ammunition for all weapons were also issued during the last days of August and when the division relieved elements of the II Corps in the vicinity of IPO-RI, regimental and battalion artillery units were close to full T/O and E strength in personnel and equipment. (124)

At the time of the division's renewed commitment, the divisional artillery regiment, code number 783, was under the command of Colonel YU-Sung-Pai. It had reached an aggregate strength of approximately 1,250 officers and men and was equipped with a total of seven 122mm howitzers, 12 76mm field guns and between four and eight 120mm mortars. The guns were all assigned to the 1st Battalion, the howitzers to the 2d Battalion and the mortars to the 3d. The latter were apparently substituted for the additional 12 76mm pieces called for by the normal table of equipment. In addition, the regiment was equipped with 12 trucks and four REM-1 transceivers. Except in the case of the 120mm mortar, ammunition supplies in the hands of the regiment appear to have been ample and have been reported as follows: 2,600 rounds of 76mm gun ammunition, including 100 rounds AP and the remainder HE; 925 rounds of 122mm howitzer ammunition; and 200 rounds of 120mm mortar ammunition. Not only was the 15th Division supported by a greater amount of organic artillery than at any time since its reorganization, but the rate of attrition of artillery weapons also seems to have been reduced by an improved

- (123) KT 0017, 0063, 0480, 0591, 0592, 0747, 0991, 1000, 1034, 1468, 1668.
(124) KT 1468, 1585, 1648, 1655, 1668, 1684, 1685, 1776.

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

system of field maintenance. A captured member of the divisional artillery reports that the ordnance shop organic to his artillery regiment had an ample supply of replacement parts for the repair of damaged artillery pieces. Were it not for the lack of combat experience of the artillery personnel in the division, the combat effectiveness of the 15th Division's artillery arm should probably receive an above-average rating. (125)

(4) North Korean 45th Infantry Division

When the 45th Division, which had been severely crippled when committed in early October 1950, was reorganized at CHONGSONG*, it retained the artillery structure of the typical North Korean infantry division but was not issued with any artillery weapons. Artillery units remained understrength until the division was transferred to MANCHURIA on about 15 November for further reorganization and training. Upon arrival at LUNG-CHING-TS'UN (42°47'N-129°26'E), the division was subordinated to the North Korean VIII Corps and all artillery units were brought up to full strength with the integration of filler personnel, most of them former ROK PsW. While undergoing intensive training in this area, the divisional artillery received initial issues of artillery weapons and ammunition. Mortars accounted for the majority of the weapons issued; no field pieces larger than 76mm were included. (126)

When the 45th Division was again contacted by UN Forces in the Inje Sector in late March, the divisional artillery regiment was still underequipped, being armed, according to one account, with 11 76mm guns. Two 122mm artillery pieces observed in the vicinity of INJE may also have belonged to the artillery regiment, but were more probably part of the corps artillery reserve. A fair cross-section of normal T/O and E artillery weapons was found in the regimental and battalion artillery, but their number was still limited. Most regiments at that time were equipped with about four 45mm antitank guns, one or two regimental 76mm howitzers and up to six 120mm mortars, while the supporting weapons in the average battalion included from three to four 82mm mortars and an equal number of 14.5mm antitank rifles. (127)

After reverting to corps reserve in the Marhwi-ri Area during the middle of May, artillery units of the 45th Division, which had sustained considerable losses in personnel as well as weapons and equipment, embarked on a program of intensive training. Concurrently replacements, most of them from the North Korean IV Corps, were received and replacement artillery weapons were issued to regimental and battalion artillery units. The activities of the divisional artillery regiment during this period are almost completely unknown except for one PW interrogation report, which states that the unit had been moved sometime in June to an artillery assembly or training area at YANGDOK. When in late July

(125) KT 1468, 1648, 1668.

(126) TIS (ADV) 2165, 2316, 2400, 2449; KT 0038, 0098, 0242, 0379, 1226, 1463, 1881.

(127) KT 0026, 0086, 0098, 0248, 0249, 0351, 0365, 0512, 1226.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

the division was briefly taken out of corps reserve to relieve the 15th Division in the Kosong (38°40'N-128°18'E) Area, supporting artillery elements played only a very minor role because of an acute shortage of ammunition. This shortage, according to one account, prompted the removal of heavier artillery pieces to the rear in order to prevent their destruction by the intense naval, air and artillery fire to which the division was exposed. (128)

During August the 45th Division received sizeable quantities of new weapons which brought most artillery units at battalion and regimental level close to their authorized equipment allowance. Late in August, on the eve of the division's renewed commitment, ample quantities of ammunition for these weapons were issued and when the division moved back into the line in the IPO-RI Sector during the first days of September, it received more effective artillery support than in any previous commitment. Most rifle regiments and battalions were supported by organic artillery units that were close to full strength in personnel and weapons. However, the whereabouts and composition of the divisional artillery regiment remained a mystery. One PW claims that the division at that time was equipped with a total of approximately 150 artillery pieces of all kinds. The typical North Korean infantry division at full strength possesses approximately 175 artillery pieces not counting self-propelled guns. Consequently, if this report be correct, it would seem to indicate that the division must have been supported at the time by an artillery regiment with at least nine pieces of miscellaneous artillery. In fact, the number was probably much greater, since most regimental and battalion artillery units were close to but had not quite reached full equipment strength. Furthermore, several reports state that the 45th Division in an attack conducted against strong UN defenses on about 10 September was supported by from 12 to 15 well emplaced and camouflaged artillery pieces described as having had a caliber of either 76mm or 100mm. It is not clear from these reports whether these pieces belonged to the corps artillery reserve or the divisional artillery regiment, although most references indicate the first alternative to be the correct one. In view of this conflicting evidence it is impossible at present to assess accurately the current artillery support potential of the 45th Division. (129)

E. North Korean IV Corps

(1) Corps Artillery

At present no information is available on the existence or current status of the artillery support organic to the North Korean IV Corps. Indeed, since the corps has been performing a coastal security mission in the P'yongyang - Chinnamp'o Area from late December 1950 until the present time, it is probable that no artillery reserve has been assigned to it in view of the shortage

(128) KT 0512, 1225, 1226, 1254, 1378, 1463, 1881.
(129) KT 1485, 1486, 1590, 1773, 1834, 1836, 1838,
1881, 1893.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

of artillery weapons which still prevails among non-combat units of the North Korean Army. (130)

(2) North Korean 4th Infantry Division

Activated at CHINNAMP'Ō in October 1948, the division artillery regiment and the other artillery units trained under the supervision of Soviet advisors in that area and at SANSAN-NI (38°36'N-125°44'E) until June 1950. Artillery officers received a three months' course of instruction at the 1st Military Academy at P'YONGYANG. Enlisted personnel were trained within their respective units. Combat preparations were begun on 15 June at YONCH'ŌN (38°06'N-127°04'E) and a basic load of ammunition was issued to the artillery. (131)

In the six weeks following the 4th Division's assault across the 38th Parallel on 25 June, UN aircraft and counterbattery fire drastically reduced the effectiveness of the division artillery. During the siege of TAEJŌN (36°20'N-127°26'E) the artillery units suffered the loss of 15 76mm guns, six 122mm mortars and 200 casualties in one 24-hour period. On the 5th of August when the division reached the NAKTONG River, the division artillery consisted of only 12 guns and 500 troops. During the latter part of August some replacement artillery pieces were received as well as a number of ROK conscripts. Subsequent participation in the fierce and unsuccessful attempt to breach the Pusan Perimeter, however, resulted in a severe reduction of the division's strength and artillery potential. (132)

All remaining artillery pieces were lost or abandoned when the division retreated northward as a result of the UN counteroffensive. By 8 November the division had reached CH'ŌR'ŌN (38°14'N-127°12'E), where it began to reorganize after fighting a brief engagement with UN Forces on the following day. Little factual information is available on the current artillery situation, since the 4th Division has been out of contact since that time and is currently stationed in the Chinnamp'Ō Area, where it is engaged in training and coastal defense. The artillery units were the last to be reorganized and equipped and reports dating from June 1951 indicate that only one battalion of the divisional artillery regiment had been formed at that time. This battalion was equipped with six 76mm M-1939 field guns. At the same time a 76mm howitzer company was reported as being with the 5th Regiment. Artillery ammunition in large quantities was observed in June in the division ammunition dump located 3½ miles northeast of KANGSO (38°58'N-125°28'E) in an abandoned coal mine. (133)

(3) North Korean 5th Infantry Division

In July 1949 the 5th Division, then the Chinese Communist 164th Division, was transferred from

- (130) KT 0572, 0623, 0722.
(131) TIS (ADV) 118, 612, 789.
(132) TIS (ADV) 83, 118, 185, 352, 365, 367, 453, 703, 789, 855, 880, 1123, 1411, 1413, 1551, 1553, 1598, 1626, 1824, 2337; ENEMY DOC #1 P/50, 54, 55, #3 P/49, 52, 61, #4 P/3.
(133) TIS (ADV) 2768, 3014, 3064, 38Q4, 3905; KT 0581, 0614, 0705, 0802, 0937.

UNCLASSIFIED

66

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

MANCHURIA to NANAM (41 42'N-129 41'E), North KOREA, From that time until May 1950 the original Japanese and US artillery pieces were gradually replaced by Soviet weapons. Many of the personnel of the artillery units, particularly the officers, were veterans of combat with the Chinese Communist Forces. By April 1950 the division artillery, having completed basic and small-unit phases of training, began to engage in joint field exercises with the infantry regiments and other supporting units. One Soviet artillery officer, a major, was attached to the unit until the division invaded the Republic of KOREA on 25 June. (134)

The 5th Infantry Division was committed on the extreme east coast, where the extremely mountainous terrain channelized the movement of artillery pieces to the existing road network. As a result of this, the division artillery was not only subjected to the UN air effort and artillery counterbattery fire but also to an almost continuous shelling by UN naval vessels standing off shore. Extremely heavy losses were sustained in the battles for YONGDOK (36°24'N-129°22'E) and P'OHANG-DONG (36°02'N-129°22'E). From a maximum effort in early August, when 70 artillery pieces (including mortars) supported one regiment in a particular engagement, the artillery's effectiveness decreased until mid-September. By that date the entire division artillery consisted of three SU-76 self-propelled guns, four 122mm howitzers, 12 76mm guns, two 76mm regimental howitzers, four 45mm antitank guns and a few mortars. (135)

Hit by the full weight of the UN counter-offensive on 21 September, the 5th Division retreated northward in disorder. The few remaining SU-76 self-propelled guns and 45mm antitank guns were almost immediately discarded. What few artillery pieces were left were destroyed on 22 September when withdrawing elements of the unit were taken under heavy fire by UN naval vessels at YONGDOK. When the scattered remnants of the division reached North KOREA they had lost all supporting weapons except a few light mortars and machine guns. Although the 5th Division was apparently reconstituted and re-equipped, no further information is available on the current organization or equipment of the divisional artillery units, since it was not again committed after joining the IV Corps in the Chinnamp'o Area in the early part of spring 1951. (136)

(4) North Korean 10th Infantry Division

The artillery regiment of the 10th Division was activated at SUKCH'ON (39°24'N-125°38'E) in mid-March 1950. Training under Soviet supervision was conducted there and later at P'YONGYANG. On 15 July two battalions of the regiment were transferred to the 8th Division. These units were replaced by two under-equipped and recently organized battalions when the

- (134) TIS (ADV) 423, 1212, 1257, 1510, 1900, 2012, 2020, 2255.
- (135) TIS (ADV) 604, 605, 740, 1032, 1082, 1154, 1254, 1269, 1425, 1510, 1549, 1611, 1630, 1956, 2265, 2311, 2377, 2483, 2772, 3104, 3107, 3151.
- (136) TIS (ADV) 1630, 2255, 2265; KT 0623.

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

division passed through SEOUL on its way to the front.
(137)

Upon initial commitment on 12 August against the UN Nakdong River Line, the 10th Division was heavily engaged and suffered considerable loss of personnel and equipment in the fighting in the Songju (35°55'N-128°17'E) - Koryong (35°44'N-128°16'E) Sector. The fact that in one reported instance all artillery pieces and ammunition of one of the rifle battalions were either captured or destroyed may serve as an indication of the severity of the equipment loss. When, following a six-day battle in that area, the division was compelled to retreat northward on 25 September, all remaining artillery pieces and ammunition were given a coat of grease, wrapped in canvas and buried in an attempt to prevent their capture. (138)

The 10th Division was reorganized in the vicinity of YANGGU beginning around the middle of October and retained an artillery regiment in its organizational structure. However, when the division was re-committed in the communist New Year's offensive, that regiment was entirely lacking in weapons. Likewise, regimental and battalion artillery units were scantily equipped and possessed no weapons heavier than mortars. This probably finds its explanation in the guerrilla mission that had been assigned to the 10th Division as part of the North Korean II Corps. In the following months the division suffered almost complete disintegration during which it lost most of its limited stock of artillery-type weapons. Only isolated elements managed to withdraw through UN lines and were subjected to a thorough reorganization and retraining program in the vicinity of KUMCH'ON (38°10'N-126°28'E). As of June 1951, after the reconstituted 10th Division had been subordinated to IV Corps, reports indicate that artillery pieces had still not been provided and armament in general remained extremely scarce. (139)

(5) North Korean 26th Infantry Brigade

The 26th Infantry Brigade, organized at NAMCH'ONJOM (38°20'N-126°24'E) in August 1950, lost the greatest portion of its original organic artillery in action against ROK troops in October. After reorganizing at NAMP'OJIN with a limited number of mortars as the only artillery support, elements of the unit were only committed once briefly in an unsuccessful invasion attempt on CH'U-DO Island (38°32'N-124°50'E) in early January 1951. Since that date the unit has performed a coastal defense mission with IV Corps. Consequently, no further information is available on its current artillery potential, although reports indicate that the brigade has received sufficient replacements to bring it up to T/O strength. (140)

- (137) TIS (ADV) 660, 1858, 2356, 3183, 3287, 3424, 3460, 3592, 3784.
(138) TIS (ADV) 1643, 1904, 1981, 3153, 3460.
(139) TIS (ADV) 3215, 3274, 3592, 4077, 4217; KT 0370, 0666, 0682, 1068.
(140) TIS (ADV) 1936, 1939, 1951, 1980, 2013, 3080, 3082, 3085, 3086, 3135.

UNCLASSIFIED 68

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

(6) North Korean 105th Tank Division

The early organization, equipment and combat record of this unit are covered in detail in an article entitled "Organization and Combat History of the North Korean 105th Armored Division" published by ATIS, GHO, FEC in Issue No. 4 of Research Supplement Interrogation Reports, Enemy Forces, dated 15 December 1950. Due to the fact that the unit has not been committed to action since the UN counteroffensive of late 1950, prisoner of war information is limited. One source, however, a deserter whose observation dates from March 1951, estimates that the division had been re-equipped with 120 T/34-85 Russian tanks. No additional information is available regarding the current artillery potential of the division. (141)

F. North Korean V Corps

(1) Corps Artillery

Although reorganized twice -- once in November 1950 at P'YONGNAMJIN (40°32'N-126°42'E) and again at SANGJONG-NI (37°26'N-127°04'E) in early April 1951 -- the units of the North Korean V Corps participated in the communist spring offensive without organic artillery support. Despite this handicap the corps initially achieved considerable success against ROK units, but sustained heavy losses from massed UN artillery fire and was forced to retreat before the UN counteroffensive. Simultaneously with the North Korean II and III Corps, the V Corps, in early June, allegedly received a full complement of artillery weapons from the USSR. While a part of these weapons was immediately issued to all divisions of the corps, the bulk was retained as a corps reserve. The senior corps artillery officer at this time was Senior Colonel CHO-Se-Gol. Colonel KIM-Hi-Kwon was the chief of staff of the artillery section. No late information is available on the artillery reserve of V Corps except for a prisoner from the corps ordnance depot captured in August who indicates that supplies of artillery ammunition for all calibers, including 122mm pieces, was ample. (142)

(2) North Korean 6th Infantry Division

After the 6th Division was organized at SINUIJU in July 1949 from the 166th Chinese Communist Division, the artillery units turned in their Japanese and US equipment and drew a full T/E allowance of Soviet pieces. The self-propelled gun battalion received its equipment and training at SINUIJU in February 1950. (143)

On 25 June the division artillery fired a 15-minute preparatory barrage on KAESONG in support of the unit's initial action south of the 38th Parallel. The strength of the artillery sections was gradually

(141) KT 1003.

(142) TIS (ADV) 3488, 3632; KT 0426, 0468, 0875, 1352, 1359.

(143) TIS (ADV) 519, 960, 1790, 1988, 2635; ENEMY DOC #200729.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

reduced by UN action, however, as the division fought its way southward to the southeast rim of the Pusan Perimeter. Prior to its flight northward at the time of the UN break-out in mid-September, all remaining artillery pieces of the division are reported to have been buried in the vicinity of SANCH'ONG (32°24'N-127°52'E). Remnants of the unit less all heavy equipment arrived at KANGGYE in late October 1950. In the reorganization which followed, the division was unable to obtain equipment for its organic artillery sections. With a strength of 5,000 but only a small number of captured US or CCF 60mm and Soviet 82mm mortars, the 6th Division entered the line in March 1951 in the area southeast of HONGCH'ON (37°42'N-127°54'E). Although having participated in the Fifth Phase Offensive and, with the exception of one month's rest and reorganization, having been in contact with UN Forces since March, the division is still reported to have only a few miscellaneous artillery pieces for fire support. The only information available in reference to the division artillery regiment places one battalion at KANGSO (38°58'N-125°28'E) in early April. Two batteries of that battalion were reportedly undergoing training and had been issued 200 Mongolian ponies and 20 carts. No mention is made of artillery pieces. The third battery of the battalion was assigned coastal security duties in the Chinnamp'o Area in June. The majority of the personnel in this battalion are reported to be North Koreans who formerly served with the Chinese Communist Forces in MANCHURIA. (144)

(3) North Korean 12th Infantry Division

Artillery units of the 12th Division, at the time of the division's activation at WONSAN in April 1950, were composed of battle-seasoned Korean veterans from the Chinese Communist Army. Training under Soviet supervision continued in the Wonsan Area until 18 June, when the division moved to INJE and deployed along the 38th Parallel. While in the early stages of the invasion the artillery support potential had been used with considerable effectiveness in the combat activity of the 12th Division on the eastern front, heavy losses of equipment and a critical shortage of ammunition soon brought about a drastic reduction of that potential. The ammunition shortage, for instance, forced the 2d Battalion of the artillery regiment to evacuate its pieces to TANYANG (36°56'N-128°32'E) in early August. By the end of that month, all artillery ammunition having been expended, artillery personnel of the division were reduced to fighting as infantry troops. (145)

The disorganized remnants of the 12th Division reached KANGGYE in mid-November without any artillery weapons and a reorganization was immediately begun.

- (144) TIS (ADV) 387, 399, 517, 529, 554, 622, 659, 696, 697, 698, 928, 1009, 1029, 1030, 1458, 1645, 1767, 1790, 1805, 1894, 2607, 3779, 3782, 4007, 4081, 4184, 4208, 4271, 4279; KT 0271, 0340, 0473, 0661, 0681, 0883, 0897, 0955, 1116, 1120, 1126, 1146, 1442, 1477.
- (145) TIS (ADV) 80, 134, 147, 721, 723, 734, 1257, 1468, 1611, 3480.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

Equipment being unavailable, however, the division was forced to operate from the time of its recommitment in the Inje Sector in late December until June 1951 without organic artillery support. By March 1951 sufficient 122mm howitzers, 76mm guns and 120mm mortars had become available to reform at least a portion of the division's artillery regiment. After receiving its new equipment and filler personnel at KANGGYE, the regiment moved to CHINNAMP'0, where it began training. (146)

Although handicapped by lack of fire power, the 12th Division participated in the communist April offensive. Aside from small arms and machine guns, its armament at that time consisted of three 82mm mortars per battalion and a limited amount of ammunition. In June, the artillery regiment less the 3d Battalion joined the rest of the division. Although all three battalions are reported to have been formed at KANGGYE, the 3d Battalion was separated from the other units of the artillery regiment and was sent to SINUIJU for reasons that have not as yet been clarified. While the 1st and the 2d Battalions have been identified as being in action against UN Forces, it is of interest to note that since its recommitment the 12th Division has not been supported by more than one battalion of its artillery at any one time. (147)

On about 4 June, the 2d Battalion of the artillery regiment went into action with the division in the defense of the Yanggu - Inje Line. This unit, which is sometimes referred to by prisoners as the "Mechanized Battalion", was composed of two batteries of 76mm guns (four guns to a battery) and one battery of four 120mm mortars. During this period there are reports that the division utilized two captured US 105mm howitzers until ammunition became unavailable. Almost immediately upon its entry into combat the 2d Battalion suffered heavy casualties from UN counterbattery fire. By the time the division had been relieved on 20 June and moved back to the vicinity of CHOMBANG-NI (38°26'N-127°54'E) for reorganization, that unit had been reduced to 30% of its original strength. (148)

In its three-week commitment the 2d Battalion had not only lost heavily in personnel but also suffered considerable equipment losses. Its remaining 76mm guns were apparently used to form a single battery which was assigned to the newly-arrived 1st Battalion. Two batteries of this 1st Battalion arrived from YANGDOK in July and, with the remaining battery from the 2d Battalion, provided artillery support for the division when it again entered the line late in that month. The two original batteries of the battalion were equipped with four 122mm howitzers each. At that time the senior artillery officer of the division was Colonel SONG-Hung-San. The understrength artillery support of the division was further handicapped in that few qualified.

(146) TIS (ADV) 2907, 2928, 2966, 3107; KT 0263, 0872, 0853.

(147) TIS (ADV) 3107, 3480, 3494; KT 0072, 0232, 0263, 0349, 1402, 1403.

(148) KT 0263, 0553, 0686, 0872, 0952, 1403, 1424, 1440.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

artillery men remained by late August. Replacements consisted largely of reclassified personnel with no technical knowledge or training. As a result, mishandling caused damage to much of the artillery equipment. A limited supply of ammunition imposed restrictions on the fire support so that by August a maximum of only five rounds per gun per day could be fired. (149)

There have been occasional reports of a 45mm antitank battalion and a 76mm mountain gun battalion operating with the division. However, from the infrequency of these reports and the fact that only one or two pieces of each type are mentioned, it appears probable that such units do not exist but rather that artillery weapons of different types and models are used as opportunity and the supply of ammunition permits. As of the last available date of information, there is no information regarding the movement or employment of the 3d Battalion of the artillery regiment nor has the current status of the 2d Battalion received clarification. (150)

(4) North Korean 32d Infantry Division

When the 32d Division participated in the defense of SEOUL after its activation at SUWON (37°16'N-127°01'E) in August 1950, its organic artillery support was patterned after that of the typical North Korean division, though it was understrength in weapons and equipment. Upon withdrawal of the division to MANCHURIA for reorganization, the artillery regiment was reformed with only two battalions. Each battalion received 12 76mm field guns, 12 122mm howitzers and 24 2½-ton trucks. In March the entire division was moved to WONSAN where it engaged in strengthening coastal defense installations. The artillery battalions trained continuously during this period until the division was transferred to the V Corps in early April. Due to UN air attacks during the move from MANCHURIA, the artillery strength at that time had been reduced to 12 76mm guns and eight 122mm howitzers. A further reduction in the artillery potential resulted from commitment of the division near INJE on 25 April and subsequently in the May offensive, where it acted as rear guard in the withdrawal of the V Corps from HYON-NI (37°56'N-128°18'E) in late May. When the 32d Division again engaged UN Forces northwest of YANGGU, its divisional artillery support, according to one source, consisted of three 76mm guns and three 122mm howitzers. (151)

G. North Korean VI Corps

(1) Corps Artillery

Formed in North KOREA in late September 1950, the VI Corps retreated to MANCHURIA in October for reorganization. Soviet equipment, with the exception of artillery, was issued prior to the time the corps moved southward to MUNSAN (37°52'N-126°40'E) in early February

(149) KT 1366, 1384, 1386, 1402, 1403.

(150) KT 0263, 0853, 1405, 1440.

(151) KT 0304, 0401, 0452, 0462, 0470, 0855, 1143, 1398, 1433, 1500.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

1951. Apparently it was at this location that the corps artillery was formed some time prior to 15 March. It is reported that at that time the corps artillery reserve consisted of six 122mm howitzers, nine 76mm guns and 30 trucks. Since with the exception of some light skirmishes with ROK guerrillas and raiding parties the corps has not been in contact with UN Forces until recently, no further information has been received on its artillery reserve. Consequently, the current artillery potential of the VI Corps remains undetermined. (152)

(2) North Korean 9th Infantry Division

Formed at SEOUL in August 1950 from the former 3d Border Constabulary Brigade, the 9th Division was supported by an artillery arm of normal structure. On 31 August, when the division, less the 3d Regiment which remained at INCH'ON, conducted a forced crossing of the NAKTONG River, the division artillery regiment was augmented by the addition of one battalion of corps artillery, a 76mm gun battalion from the 16th Tank Brigade and another battalion of 76mm guns from the 4th Division. Under the control of the 9th Division artillery commander, these units delivered a concentrated 30-minute barrage prior to the crossing. In the heavy fighting which followed, the 9th Division suffered crippling losses in men and equipment. By 15 September the strength of the artillery regiment had been reduced to less than 500 men and only five 76mm guns remained. (153)

In the course of its flight northward to the Hup'yong-Ni (38°37'N-127°09'E) Area in late September, the remaining artillery pieces of the division were lost. During the subsequent reorganization in the Kumhwa - Ich'on Area, the strength of the division was raised to around 5,000 men, but no organic artillery units were formed. This situation continued throughout the division's commitment in the Yongwol (37°10'N-128°28'E) Sector from late January until mid-March 1951 as part of the II Corps. Out of contact since that time, the division is reported to have received a considerable number of replacements and in August was moved to the east coast with other elements of the VI Corps. One report with an observation date of 18 August indicates that the artillery regiment has been reformed with a strength of 500 troops. This report places four 122mm howitzers, five 76mm field guns and nine trucks in the 1st Battalion; three 122mm howitzers, three 76mm field guns and five trucks in the 2d Battalion; and 10 76mm field guns in the 3d Battalion. (154)

(3) North Korean 18th Infantry Division

In the process of its conversion from an independent brigade into an infantry division in July

- (152) TIS (ADV) 2916, 4059, 4064, 4289; KT 0004, 0569, 0932, 1603.
- (153) TIS (ADV) 946, 949, 1406, 1408, 1434, 1592, 1598, 1615, 1663, 1719, 1726, 1738, 1778, 1867, 1978, 2541, 2630; ENEMY DOC #4, P/16-20.
- (154) TIS (ADV) 1404, 1615, 1619, 2360, 2861, 3064, 3067, 3596, 3638, 3642, 3756, 4140; KT 1603, 1632, 1644.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

1950, this unit absorbed the 22d Artillery Regiment as its organic artillery support. After participating in the defense of the Seoul - Inch'on Complex, the division was completely routed and withdrew to MANCHURIA, where it was reorganized and retrained under VI Corps. Information regarding the artillery structure of the division upon reorganization is scant, since in spite of moving south to the Yonan (37°54'N-126°10'E) Area with the rest of the VI Corps in February 1951, the 18th Division has not again been committed. However, one prisoner from the 1st Regiment of the 18th Division reports that an independent battery of four 76mm howitzers was attached to his regiment at the time of his capture on 19 September. Another source claims that as of 27 August the organic artillery of the 2d Regiment included a mortar company with three 120mm mortars and 50 men and an anti-tank company likewise with a strength of 50 men and equipped with four 45mm antitank guns. Pending further confirmation, therefore, it may be tentatively assumed that the infantry regiments of the 18th Division have been issued at least a portion of their organic artillery; but the status of the divisional artillery regiment must remain doubtful. (155)

(4) North Korean 19th Infantry Division

Organized at SUKCHON in mid-August 1950, the 19th Division had an artillery arm of normal structure but was not issued its full complement of supporting weapons. In the course of its brief delaying action in the Kaesong Sector against the UN autumn offensive, the unit suffered the loss of most of its organic artillery equipment and sustained heavy personnel casualties. After withdrawing to MANCHURIA, it was reorganized and trained until February 1951 under VI Corps. Reports indicate that at the time of its return to North Korea, the division had drawn approximately 80% of its T/E equipment, including artillery weapons. One source states that in February the division artillery regiment was equipped with 16 76mm guns, 16 122mm howitzers and 32 trucks. Each regiment was armed with both 76mm guns and 45mm antitank guns. Despite the presence of considerable organic artillery support, the unit suffered a decisive defeat in March when it attempted to cover the withdrawal from SEOUL of the North Korean I Corps. Although the 19th Division enjoyed the support of an artillery arm that was vastly superior in fire-power to that of most other North Korean combat units of that time, it made a generally poor showing in this action and displayed poor training and low morale. After withdrawal of the division to NUCHON-NI (38°14'N-126°18'E) for a month's reorganization, artillery units were brought up to strength but received no replacement weapons. At this time the 3d Battalion of the artillery regiment was sent north to SINUIJU and its remaining weapons were distributed to the other battalions. A PW from the artillery regiment, captured shortly after the division returned to the line in April, places the armament of the regiment at six 122mm howitzers and six

(155) TIS (ADV) 1304, 1314, 1336, 1339, 1353, 1534, 1660, 1935, 2018, 2519, 3783; KT 1505.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

76mm guns. In its second commitment on 25 April, the 19th Division again suffered heavy casualties and was forced to withdraw and reorganize a second time. Since the 19th Division was out of contact from late May until about 1 September, when it was engaged by friendly forces in the Komisong (38°26'N-128°16'E) Area, few prisoners from the division have been captured during that time and it is difficult to assess its current artillery strength. Apparently, however, the 122mm howitzer battalion as well as the 76mm gun battalion of the divisional artillery regiment are still operational, although the extent of their equipment is unknown. The division's complement of 45mm antitank guns seems to be unusually high, for reports indicate that each rifle battalion is equipped with four of these weapons. Indeed one report credits the division with a total of 48.45mm antitank guns. This, if true, would represent the full T/E allowance of a typical North Korean infantry division for this particular type of weapon. (156)

H. North Korean VII Corps

(1) Corps Artillery

At the time of its reorganization in MANCHURIA during the latter part of 1950 and early part of 1951, the VII Corps was issued a good portion of its T/E allotment of artillery weapons. However, it has not yet been determined whether an artillery reserve unit was formed at that time and assigned to the corps. Indeed, in view of the circumstance that this organization has never been committed to action since its return to North Korea from MANCHURIA, the current artillery situation in the North Korean VII Corps remains a matter of conjecture. (157)

(2) North Korean 3d Infantry Division

Following its activation at HAMHUNG in October 1948, the 3d Division, which adhered to the artillery structure found in the typical North Korean infantry division, underwent intensive training under Soviet supervision. Members of the self-propelled gun battalion received specialized instruction at the armored training school at SADONG (39°02'N-125°48'E). The results of this preparation were evident in the campaign against the Korean Republic, for the division spearheaded many enemy drives and was generally regarded as one of the best of the North Korean combat units. Aided by heavy and accurate artillery fire, the 3d Division crossed the 38th Parallel on 25 June 1950 and four days later occupied SEOUL. In the drive to the south, massed artillery fire was not used until 12 July, when the self-propelled gun battalion, in coordination with the attached tanks of the division, launched a fierce bombardment of UN positions around CHOCH'WON (36°36'N-127°18'E). By the time that the unit had reached the NAKTONG River on about 9 August, artillery ammunition had

- (156) TIS (ADV) 1921, 1953, 1973, 2030, 2058, 2194, 2290, 2451, 3778, 4122, 4289; KT 0004, 0060, 0508, 0569, 0703, 0781, 1284, 1487, 1570, 1571.
(157) KT 1286, 1288.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

become critically short, resulting in a corresponding decrease in the effectiveness of artillery support. A further factor in the reduction of the division's firepower was the heavy fighting in the NAKTONG River area which resulted in considerable loss of artillery weapons from UN aircraft and counterbattery fire. By 20 September some 60 pieces of artillery had been lost, including all equipment of the self-propelled gun battalion. The remaining heavy support weapons of the division were lost in the retreat northward that followed the UN break-out from the Pusan Perimeter. (158)

From October 1950 until July 1951, the history of the division and of its artillery support becomes obscure. While it was apparently reorganized in MANCHURIA, no details are known. A PW of very doubtful reliability reports that organic artillery of each rifle regiment at that time included three or four truck-drawn 76mm field guns with about 20 rounds of ammunition per gun. In addition, the division allegedly possessed five truck-mounted antiaircraft guns of unknown caliber and a number of company mortars. The 3d Division is not again identified until 7 June, when two PSW locate it respectively in the Inje Area as part of the II Corps and the Kumsong (38°25'N-127°36'E) Sector subordinate to III Corps. These informants indicate that each battalion was armed with around three 82mm mortars and two anti-tank rifles. The division includes an artillery regiment of unknown composition, according to one of these sources, as well as an antiaircraft regiment. Since the 3d Division has apparently never been committed after it returned from MANCHURIA, its current artillery situation is still not clear; but in view of its past mission, the organic artillery support may be expected to fall short of other combat units of the enemy in both equipment and proficiency. (159)

(3) North Korean 7th Infantry Division

At the time of the activation of the 7th Division in July 1950, the former 45mm antitank unit of the 3d Border Constabulary Brigade became the nucleus for the division artillery regiment. While the division proceeded southward from SEOUL on 31 July, the artillery regiment remained behind in the ROK capital and did not rejoin the division until the latter part of August. When the divisional artillery unit finally caught up with its parent unit, it added little fire support since it had few artillery pieces. After several tactical reverses which culminated in the UN counteroffensive in mid-September, the 7th Division lost its remaining artillery weapons and withdrew northward to HOECH'ANG (39°06'N-126°28'E) for reorganization. By late November a unit designated as the artillery regiment but actually of only battalion strength had been formed but was armed only with mortars and small arms. This unit supported the division when recommitted on the central front in January

- (158) TIS (ADV) 1, 7, 32, 179, 480, 598, 643, 779, 855, 1508, 1641, 1710, 1742, 1978, 3785, 3806, 4143.
(159) TIS (ADV) 1, 7, 32, 480, 598, 643, 779, 855, 1508, 1641, 1710, 1742, 1978, 2988, 3094, 3785, 3806, 4143; KT 0873, 1071.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

and February 1951 as part of the V Corps. In addition, the division at that time enjoyed the support of a small amount of battalion artillery which averaged between three and four 82mm mortars and an equal number of 14.5mm antitank rifles. Ammunition for all types of weapons was very scarce and imposed further restrictions on the already limited fire-power of the supporting artillery. In the bloody combat operations waged by V Corps during this period, the division was reduced to a strength of around 4,000 troops and was taken out of line for reorganization. Since that time it has not been committed again and, consequently, its current artillery structure and the effectiveness of its supporting weapons remain undetermined. (160)

(4) North Korean 24th Infantry Brigade

Reorganized in November 1950, the 24th Division has never been committed to action. Since arriving in the Wonsan Area in December, it has engaged in a coastal defense mission. As a result, information concerning the organization and equipment of the artillery support organic to this unit is meager and contradictory. In mid-May 1951, the division was apparently redesignated the 24th Infantry Brigade. While one PW who deserted in mid-July 1951 claims that the unit possessed no artillery pieces at that time, another deserter captured during the same period alleges that the brigade was comprised of six infantry battalions and three artillery battalions. The artillery battalions, according to this source, were equipped with seven of what he believes to have been 82mm mortars and 25 105mm howitzers. A third PW whose information dates from the middle of August contends, on the other hand, that only one battalion of artillery equipped with an unknown number of 120mm mortars was included in the brigade structure. Two sources convey hearsay information according to which the 24th Brigade was to receive additional artillery weapons "in the near future". According to one of them, 25 US 105mm howitzers were expected to arrive in the unit, while the other PW alludes to a future shipment of 150mm guns (possibly 122mm howitzers) and 76mm guns. (161)

(5) North Korean 37th Infantry Division

After reorganizing in MANCHURIA, the 37th Division marched to WONSAN and occupied coastal defense positions. Since the division has remained in that area up to the present time and has not yet been contacted, no information is available regarding its artillery potential. With a low state of training and a frequent turn-over of personnel due to the fact that this unit, too, served as a source of replacements, the conclusions made above regarding the artillery potential of the 24th Division also apply to the 37th. (162)

- (160) TIS (ADV) 729, 1170, 1187, 1232, 1812, 2701, 2917, 3137, 3407, 3409, 3430, 3431, 3458, 3468, 3857; KT 0941.
(161) TIS (ADV) 1527; KT 1150, 1157, 1268, 1288, 1309, 1880.
(162) KT 1150, 1157.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

(6) North Korean 46th Infantry Division

Organized in early October 1950 from elements of the 19th Division, the 46th Division's artillery regiment was patterned after that of the standard North Korean infantry division. After withdrawing to MANCHURIA in late October the division was reorganized and underwent further training. When the division reappeared in KOREA in the vicinity of HAMHUNG during February 1951, where it manned defensive positions, the artillery regiment was said to have been equipped with 12 120mm mortars, eight 76mm field guns, and 12 45mm antitank guns. Like the other units of the VIII Corps, the 46th Division has furnished numerous replacements to front line organizations and, therefore, probably compares to the 24th and 37th Divisions in its current artillery potential. (163)

(7) North Korean 63d Brigade

The artillery situation in the 63d Brigade has as yet received no clarification, since no current information on this unit is available.

(163) TIS (ADV) 2200, 2410, 2511, 2605, 2606, 2678, 4220.

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

INDEX TO ATIS INTERROGATION REPORT NUMBER 106

<u>SUBJECT</u>	<u>AREA</u>	<u>PAGE</u>
AIRFIELD	P'YONGYANG	50
AIR FORCE		
UNITED NATIONS	NORTH KOREA	17,27
EFFECT OF	INCH'ON	48
TACTICS	SINDOK-TONG	46
	HOEYANG	54
	KAERON	66
	KOREA	46,55,61,67,76
	KOSONG	65
	NORTH KOREA	2,3,7,15,18, 21-23, 29,32, 34,38,72
	PUGONG-NI	51
	P'YONGYANG	50
	SEOUL	49
ARMY		
CHINESE	MANCHURIA	67,70
COMMUNIST		
NORTH KOREAN	NORTH KOREA	8,14,17,21, 23-26,34,37, 38,40,41,44
ACTIVATION	NORTH KOREA	43
ASSEMBLY	HOEYANG	52
	KUMHWA	61
	YANGGU	51
CENTER		
TRAINING	HOEYANG	54
	KAECH'ON	59
	KUMSONG	60
	NAJIN	61
	NORTH KOREA	45
CONSCRIPTION	KAERON	66
	LUNG-CHING-TS'UN	64
	NORTH KOREA	22,44
EFFICIENCY	NORTH KOREA	7,26,30,38
HEADQUARTERS		
CORPS	HAEJU	49
	KORANGP'U-RI	45
	NAKTONG-NI	19
GENERAL	NORTH KOREA	3,25,28
TACTICAL	NORTH KOREA	28
UNIT	HOEYANG	54,57
	NORTH KOREA	18,29,32,34- 36,37,39
MISSION	KAESONG	47
MORALE	KOREA	74
	NORTH KOREA	44
QUASI-MILITARY	NORTH KOREA	43
REORGANIZATION	CH'OSAN	46
	MANCHURIA	64,76
	YANGDOK	46
REPLACEMENTS	CHOMBANG-NI	72
	HAEJU	49,50
	HAMHUNG	78
	HOEYANG	52,54,56
	KANGGYE	71
	KOREA	68
	KWANGJU	47
	LUNG-CHING-TS'UN	64
	MARHWI-RI	63,64
	NORTH KOREA	2,5,6,22, 41,42,44

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

<u>SUBJECT</u>	<u>AREA</u>	<u>PAGE</u>
ARMY		
NORTH KOREAN		
REPLACEMENTS	NUCHON-NI	74
	P'YONGSAN	47
	SINDOK-TONG	46
	SINUIJU	48
	T'ONGCH'ON	61
	WONSAN	77
	YONGWOL	73
RESERVE	CHINNAMP'O	65
	HOEYANG	59
	INJE	64
	IPO-RI	59
	MARHWI-RI	64,65
	NORTH KOREA	29,30,73
	P'YONGYANG	50,65
TABLE OF ORGANIZATION & EQUIPMENT	INJE	64
	IPO-RI	59,63
	KANGNUNG	46
	KOREA	53
	NORTH KOREA	29
	SINUIJU	54
	CH'ONGCH'ON	75
TACTICS	CH'UNCH'ON	51
	HAEJU	46
	HOECH'ANG	76
	HUP'YONG-NI	73
	HWACH'ON	52
	HWASAN-JONG	46
	HYON-NI	72
	ICH'ON	51
	INCH'ON	48,74
	INJE	53,55,71,72
	IPO-RI	59,65
	KAEJON	66
	KAESONG	59,69,70,74
	KOMISONG	75
	KOREA	51,59,67,69, 71,73,75,76
	KORYONG	68
	MANCHURIA	72,74,78
	MUN'YONG	60
	NAKTONG-NI	19,68
	NORTH KOREA	2-10,12-28, 30,31,34,36, 38,39,43,67,69
	NUCHON-NI	74
	PUGONG-NI	51
	P'YONGCH'ANG	58,60
	SANCH'ONG	70
	SEOUL	46,48,49,59, 72,74-76
	SONGHYON-NI	59
	SONGJU	68
	TAEJU	48,60
	TOKCH'ON	62
	YABAN-SAN	8
	YANGDOK	71
	YANGGU	56,68
	YONCH'ON	66
	YONGCH'ON	62

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

<u>SUBJECT</u>	<u>AREA</u>	<u>PAGE</u>
ARMY		
NORTH KOREAN	CHINNAMP'Ō	66
TRAINING	CH'OSAN	46
	HOEYANG	52
	MANCHURIA	64
	NORTH KOREA	4,25
	SONGHYON-NI	59
	YANGDOK	46
ANTI-AIRCRAFT	MANCHURIA	50
ARMORED	SADONG	75
	SINUIJU	69
ARTILLERY	CHINNAMP'Ō	66,71
	HAMHUNG	51
	HOEYANG	54,57,59
	INJE	58,62
	KANGGYE	52,60
	KANGSO	57,70
	KOREA	58,78
	KUMGANGWON-NI	55
	KUMSONG	60,63
	LUNG-CHING-TS'UN	64
	MANCHURIA	55,74
	MANP'ŌJIN	60
	MAHWHI-RI	63,64
	NAJIN	61
	NANAM	67
	NORTH KOREA	5,6,13,28,40-45
	P'YONGYANG	50,66,67
	SANSAN-NI	66
	SINUIJU	48
	SUKCH'ON	67
	T'ONGCH'ON	61
	WONSAN	72
	YANGDOK	64
	KOREA	74
EFFICIENCY	NORTH KOREA	43,44
	WONSAN	77
ENGINEER	NORTH KOREA	41
INFANTRY	CHINNAMP'Ō	66
	HAMHUNG	75
	HOEYANG	56
	KOREA	78
	KUMCH'ON	68
	MANCHURIA	74
	MAHWHI-RI	63,64
	NANAM	51,67
	NORTH KOREA	41
ORDNANCE	NORTH KOREA	42
RECONNAISSANCE	NORTH KOREA	44
SIGNAL	NORTH KOREA	40,44
TROOP MOVEMENT	CHINNAMP'Ō	71
	HAEJU	50
	HOEYANG	57
	HUNGNAM	57
	HWACH'ON	52
	INJE	70
	IPO-RI	61,65
	KANGGYE	70,71
	KANGSO	57
	KOREA	73
	KOSONG	65

UNCLASSIFIED

~~SECRET~~ SECURITY INFORMATION

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

SUBJECT	AREA	PAGE
ARMY		
NORTH KOREAN		
TROOP MOVEMENT	KUMHWA	61
	KUMSONG	60,63
	LUNG-CHING-TS'UN	64
	MANCHURIA	64,66,67,72,76
	MARHWI-RI	64
	MUNSAN	72
	NAJIN	61
	NANAM	66,67
	NORTH KOREA	7,18,19
	P'YONGYANG	63
	SEOUL	50
	SINUIJU	63,71,74
	T'ONGCH'ON	60,61
	WONSAN	57,70,72,77
	YANGDOK	64
	YANGGU	51
	YONAN	74
UNIT	CH'ORWON	66
	HAERJU	48,49
	INCH'ON	73
	INJE	64
	IPO-RI	59
	KANGGYE	58
	KOREA	48,66,77
	KOSONG	65
	LUNG-CHING-TS'UN	64
	MANCHURIA	76
	MARHWI-RI	64
	NANAM	67
ACTIVATION	NORTH KOREA	7,15,23,27,43
	CHINNAMP'Ō	66
	HAMHUNG	75
	KAECH'ON	59
	KANGGYE	71
	KANGNUNG	46
	KANGSO	56,57
	MUNSAN	73
	NAJIN	61
	NANAM	51
	NORTH KOREA	3,72,76
	P'YONGYANG	47
	SINUIJU	49,54
	SUKCH'ON	67
	SUWON	72
	WONSAN	70
ANTI-AIRCRAFT	YONGWON	49
	INJE	76
	KORANGP'Ō-RI	45
	KUMSONG	76
	NORTH KOREA	32
	MANCHURIA	50
ANTI-TANK	CHOMBANG-NI	72
	IPO-RI	61
	KANGNUNG	46
	KOREA	53,74
	KWANGJU	47
	NORTH KOREA	3,27,31,33,
		34,36-38,76
	P'YONGYANG	48
	SEOUL	49
ARMORED	HAMHUNG	75

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

<u>SUBJECT</u>	<u>AREA</u>	<u>PAGE</u>
ARMY		
NORTH KOREAN		
UNIT		
ARMORED	KANGNUNG	46
	KOREA	61,73,76
	MUN'YONG	60
	NORTH KOREA	6,31,34,35,69
	P'YONGYANG	48
	SEOUL	75
	SINUIJU	69
ARTILLERY	CHINNAMP'O	66,67,71
	CHOMBANG-NI	71,72
	FAEJU	49
	HOECH'ANG	76
	HOEYANG	57,59
	HUNGNAM	57
	HWACH'ON	52
	HWASAN-JONG	46
	INCH'ON	48
	INJE	54,71,76
	IPO-RI	61,63,64
	KAEJON	66
	KAESONG	69
	KANGGYE	52
	KANGNUNG	46
	KANGSO	56,70
	KOMISONG	75
	KORANGP'O-RI	45
	KOREA	51,53,55,67,73,74,78
	KOSONG	65
	KUMHWA	61
	KUMSONG	60,63,76
	KUNGANGWON-NI	55
	KWANGJU	47
	LUNG-CHING-TS'UN	64
	MANCHURIA	55,72,75,76
	MANP'OJIN	68
	MARHWI-RI	63,64
	MUNSAN	72,73
	NAJIN	61
	NAKTONG-NI	19
	NAMCH'ONJOM	68
	NANAM	51
	NORTH KOREA	2-4,6,9,14-18,20-22,24-33,35-37,40,41,43-45,50,72,76
	NUCHON-NI	74
	P'YONGCH'ANG	62,63
	P'YONGNAMJIN	69
	P'YONGSAN	47
	P'YONGYANG	48,51,63
	SANGJONG-NI	69
	SANSAN-NI	66
	SEOUL	49,73,76
	SINANJUNG-RI	55
	SINUIJU	48,54,63,69,71,74
	SUKCH'ON	67,74
	SUWON	72
	TANYANG	70
	TOKCH'ON	62
	T'ONGCH'ON	60

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

<u>SUBJECT</u>	<u>AREA</u>	<u>PAGE</u>
ARMY		
NORTH KOREAN UNIT		
ARTILLERY	WONSAN	57,70,72,77
	YANGDOK	56,64,71
	YANGGU	51,56,68,71
	YONGCH'ON	62
BAND	NORTH KOREA	32
CHART OF	NORTH KOREA	28,32,34,36
COMMAND	KWANGJU	47
	MANCHURIA	50
	NORTH KOREA	32,34,36
CULTURAL	NORTH KOREA	35
DEACTIVATION	KANGSO	57
EFFICIENCY	CHOMBANG-NI	71,72
	HOEYANG	54
	IPO-RI	59,64
	KOREA	53,67
	KUMHWA	61
	NORTH KOREA	2,4,13,28,41,45,69
	P'YONGCH'ANG	62
	P'YONGYANG	50,51
	SEOUL	74
	SINUIJU	48
	WONJU	56
	YONGCH'ON	62
ENGINEER	NAKTONG-NI	19
	NORTH KOREA	15,21,33,35
FINANCE	NORTH KOREA	32
GUERRILLA	HWACH'ON	52
	YANGGU	68
INFANTRY	CH'INNAMP'IO	66
	CH'IO-DO ISLAND	68
	CHONGSONG	64
	HAEJU	49
	HAMHUNG	75,78
	HOEYANG	56-58
	HONGCH'ON	70
	HWACH'ON	52
	INJE	64,71,76
	IPO-RI	61,63
	KUMHWA	61
	KANGGYE	62,70
	KANGYUNG	46
	KOMUSONG	75
	KOREA	53,74,75,77
	KORYONG	68
	KUMSONG	76
	KUNGANGWON-NI	55,56
	MANCHURIA	72,76,77
	MARHWI-RI	63,64
	NAJIN	61
	NAMCH'ONJOM	68
	NANAM	51,67
	NORTH KOREA	3,4,6-10,12,13,15,18,20,21,25,27,31,33,35-37,44,78
	NUCHON-NI	74
	P'YONGCH'ANG	62,63
	P'YONGSAN	47
	P'YONGYANG	48

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

<u>SUBJECT</u>	<u>AREA</u>	<u>PAGE</u>
ARMY		
NORTH KOREAN		
UNIT		
INFANTRY	SEOUL	50,68,73
	SINUJU	48,49,54,69
	SONGJU	68
	SUKCH'ON	67,74
	SUWON	72
	TOKCH'ON	62
	WONSAN	70,72,77
	YANGDOK	56
	YANGGU	72
	YONGWOL	73
	YONGWON	49
INTENDANCE	NORTH KOREA	33
MECHANIZED	HAERU	48
	INCH'ON	48
	NORTH KOREA	47
	P'YONGYANG	48
	SEOUL	48
MEDICAL	NORTH KOREA	32
MISSION	P'YONGYANG	50
MORALE	NORTH KOREA	41
MORTAR	NORTH KOREA	37
ORDNANCE	NORTH KOREA	32
ORGANIZATION	HOECH'ANG	76
	NAMCH'ONJOM	68
	SINUJU	69
	SUKCHON	74
	YANGDOK	56
REACTIVATION	HAERU	49
REAR SERVICE	NORTH KOREA	29,31,32,35
RECONNAISSANCE	HOEYANG	54,59
	NORTH KOREA	8,19,20,
		30,32,37
REDESIGNATION	KOREA	77
	NORTH KOREA	43,76
	SINUJU	69
	SUKCH'ON	67
REORGANIZATION	CHINNAMP'Ō	66,67
	CHOMBANG-NI	71
	CHONGSONG	64
	CH'ORWON	66
	HAERU	49,50
	HOECH'ANG	76
	HOEYANG	52,56
	HONGCH'ON	70
	ICH'ON	73
	INJE	53
	KANGGYE	52,58,60,70
	KOREA	48,74,75,77,78
	KUMCH'ON	68
	KUMHWA	73
	MANCHURIA	55,72,74,75,77
	MANP'ŌJIN	60,68
	MARHWI-RI	63
	NORTH KOREA	7,27,45,50,78
	NUCHON-NI	74
	P'YONGNAMJIN	69
	P'YONGSAN	47
	SANGJONG-NI	69

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

<u>SUBJECT</u>	<u>UNCLASSIFIED</u>	<u>AREA</u>	<u>PAGE</u>
ARMY			
NORTH KOREAN			
UNIT			
REORGANIZATION	SEOUL		73
	TOKCH'ON		62
	WONSAN		77
	YANGGU		68
REPLACEMENT	SUKCH'ON		67
RESERVE	SINANJUNG-RI		55
SECURITY	NORTH KOREA		21
SIGNAL	HOEYANG		54,57
	NORTH KOREA		29,31-33,
			35,37,39
SUPPLY	NORTH KOREA		29,32,36
TRANSPORTATION	NORTH KOREA		32
REPUBLIC OF KOREA			
GUERRILLA	MUNSAN		73
TACTICS	CH'UNCH'ON		51
	KOREA		69
	NAMCH'ONJOM		68
	SARAK-SAN		56
UNIT			
SOVIET			
TACTICS	USSR		8
UNITED NATIONS	NORTH KOREA		16,26,69
EFFECT OF	INCH'ON		48
EFFICIENCY	HOEYANG		58
TACTICS	HOEYANG		54
	HWASAN-JONG		46
	INCH'ON		2,48
	INJE		53,71
	KAEJON		66
	KAESONG		74
	KOREA		48,55,67,69,76
	KOSONG		65
	NORTH KOREA		2,7,15,19,22,
			30,34,46
	PUGONG-NI		51
	SEOUL		48,49,59
	TAEGU		60
	YANGGU		56,71,72
	YONGCH'ON		62
UNIT			
ARTILLERY	NORTH KOREA		25
BRIDGE			
DESTRUCTION OF	NORTH KOREA		19
CASUALTIES	HAJINBU-RI		53
	HOEYANG		58
	KAEJON		66
	KAESONG		69,74
	KOREA		46,51,64,69,
			73,75,77
	KORYONG		68
	KWANGJU		47
	MARHWI-RI		64
	NAMCH'ONJOM		68
	NORTH KOREA		10,30,40,44,52
	P'YONGSAN		47
	SEOUL		46
	SONGJU		68
	SORAK-SAN		56
	WONJU		56
	YANGGU		68
CAUSE OF	INJE		71
	KOREA		55

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

<u>SUBJECT</u>	<u>AREA</u>	<u>PAGE</u>
CASUALTIES	NORTH KOREA	7,8,13
CAUSE OF	POHANG-DONG	67
	YABAN-SAN	8
	YONGDOK	67
	YONGCH'ON	62
COMMUNICATIONS	NORTH KOREA	39
	WONJU	56
NETWORK	NORTH KOREA	38
SKETCH OF	NORTH KOREA	40
RADIO	NORTH KOREA	5,6,38
NETWORK		
SKETCH OF	NORTH KOREA	40
SHORTAGE OF	NORTH KOREA	14
TELEPHONE	NORTH KOREA	5,38
DEFENSE		
AIR	NORTH KOREA	19
ANTI-AIRCRAFT	KORANGP'O-RI	45
CAMOUFLAGE	HOEYANG	58
	IPO-RI	65
	KOREA	53
	NORTH KOREA	4,11,13,19-22
FORTIFICATION	CH'OGH'WON	75
	NORTH KOREA	15-17,22
ANTI-TANK	NORTH KOREA	20
ARTILLERY	HOEYANG	54,58
	IPO-RI	65
	KOREA	53
	NORTH KOREA	4,11,16-18,20-22,25,38,40
	YONGCH'ON	62
DUMMY	NORTH KOREA	15
CONSTRUCTION OF	NORTH KOREA	13
DUMMY	NORTH KOREA	15,21
PILLBOX	HOEYANG	58
TANK		
DUMMY	NORTH KOREA	15
TRENCH	HOEYANG	54
	NORTH KOREA	21
MINE FIELD	NORTH KOREA	15
SECURITY MEASURES	CHINNAMP'O	65,66,70
	HUNGNAM	57
	KOREA	68
	P'YONGYANG	65
	T'ONGCH'ONG	61
	WONSAN	57,72,77
GUARD	NORTH KOREA	19
SHELTER	NORTH KOREA	21,22
EQUIPMENT		
AMMUNITION		
LOSS OF	KORYONG	68
	SONGJU	68
	NORTH KOREA	6
SHORTAGE OF		
COMMUNICATION	NORTH KOREA	5,40
EFFICIENCY	HOEYANG	54
RADIO	IPO-RI	63
	NORTH KOREA	32,33,35,39,40
LOSS OF	NORTH KOREA	44
SHORTAGE OF	KOREA	53
	NORTH KOREA	5,6,25,39,50
SWITCHBOARD	HOEYANG	57

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

<u>SUBJECT</u>	<u>AREA</u>	<u>PAGE</u>
EQUIPMENT		
COMMUNICATION		
SWITCHBOARD	HUNGNAM	57
	NORTH KOREA	32, 39
	WONSAN	57
TELEPHONE	HOEYANG	54, 57
	HUNGNAM	57
	NORTH KOREA	25, 32, 33, 35, 39, 40
WIRELESS	WONSAN	57
	HOEYANG	57
	HUNGNAM	57
	WONSAN	57
LOSS OF	NORTH KOREA	40
	SORAK-SAN	56
MILITARY	KANGSO	70
	NORTH KOREA	13, 25, 26, 33
LOSS OF	CHOMBANG-NI	71
	KOREA	73
	KORYONG	68
	MAHWHI-RI	64
	NORTH KOREA	38, 44
	SONGJU	68
SHORTAGE OF	NORTH KOREA	28
PONTON	NAKTONG-NI	19
VEHICLE	NORTH KOREA	22
ARMORED	HAERJU	48
HORSE-DRAWN	KANGGYE	62
	KANGSO	70
	NORTH KOREA	22, 32, 37
LOSS OF	HWACH'ON	40
	IWASAN-JONG	46
	NORTH KOREA	18
	SINDOK-TONG	46
PRIME MOVER	HOEYANG	54
	KOREA	50
	MANCHURIA	55
	NORTH KOREA	22, 32
TRUCK	HOEYANG	54, 57
	HUNGNAM	57
	IPO-RI	63
	KOREA	73
	MANCHURIA	55, 72, 74, 76
	MUNSAN	73
	NORTH KOREA	29, 30, 32, 33, 35, 36, 50, 55
WEAPONS	WONSAN	57
	IPO-RI	59
	NORTH KOREA	2, 12, 18, 32
ANTI-AIRCRAFT	TAEJU	60
	KORANGP'O-RI	45
	MANCHURIA	50, 76
	NORTH KOREA	12, 34
ANTI-TANK	HAERJU	46, 48
	HAMHUNG	78
	HOEYANG	56, 58
	INJE	64, 76
	IPO-RI	61
	KANGGYE	58, 62
	KOMISONG	75
	KOREA	53, 67, 74, 77
	KUMSONG	76
UNCLASSIFIED	KUNGANGWON-NI	56

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

<u>SUBJECT</u>	<u>AREA</u>	<u>PAGE</u>
EQUIPMENT		
WEAPONS		
ANTITANK	KWANGJU	47
	MANCHURIA	74
	MANP'OJIN	60
	MARHWI-RI	63
	NORTH KOREA	7,9,12,20,21,24,30,32-34,36-38,42
	P'YONGCH'ANG	62
	P'YONGSAN	47
	P'YONGYANG	48,50
	SEOUL	49,50
	YANGDOK	56
LOSS OF	CH'UNCH'ON	51
ARMORED	KOREA	51,67
	CH'UNCH'ON	51
	IPO-RI	65
	KOREA	67,69,76
	NORTH KOREA	9,34,35
	P'YONGYANG	48
	SEOUL	75
LOSS OF	SINUIJU	48,69
	CH'UNCH'ON	51
	INCH'ON	48
	KOREA	61,67
ARTILLERY	NORTH KOREA	51
	CHOMBANG-NI	71
	CHONGSONG	64
	HAERU	46,48
	HAMHUNG	78
	HOECH'ANG	76
	HOEYANG	54,56-58
	HUNGNAM	57
	HWACH'ON	52
	INJE	64,71,76
	IPO-RI	59,61,63-65
	KANGGYE	58,60,62
	KORANGP'O-RI	45
	KOREA	53,55,66,67,71,73,77
	KUMSONG	76
	KUNGANGWON-NI	56
	KWANGJU	47
	MANCHURIA	72,74-76
	MANP'OJIN	68
	MARHWI-RI	63
	MUNSAN	73
	NANAM	67
	NORTH KOREA	3,9,11,12,18,20-22,24,25,27-29,30-33,35,36,41,42
	PUGONG-NI	51
	P'YONGCH'ANG	60,62,63
	P'YONGYANG	48,50
	SEOUL	49,50
	SINANJUNG-RI	55
	SINUIJU	48,54,69,74,75
	WONSAN	57,77
	YANGDOK	56
	YANGGU	71,72
	YONAN	74

UNCLASSIFIED

~~SECRET~~ SECURITY INFORMATION

~~SECRET SECURITY INFORMATION~~

<u>SUBJECT</u>	<u>UNCLASSIFIED</u>	<u>AREA</u>	<u>PAGE</u>
EQUIPMENT			
WEAPONS			
ARTILLERY			
DUMMY		MANCHURIA	55
EFFICIENCY		NORTH KOREA	36
LOSS OF		CH'UNCH'ON	51
		HAIJINBU-RI	53
		HUP'YONG-NI	73
		HWASAN-JONG	46
		ICH'ON	51
		INJE	53
		KAESON	66
		KAESONG	74
		KOREA	51,55,76
		KUMHWA	61
		MUN'YONG	60
		NORTH KOREA	2,72
		P'YONGSAN	47
		SEOUL	46,49,59
		SINDOK-TONG	46
		SINUIJU	48
		TANYANG	70
		YONGCH'ON	62
RESUPPLY		NORTH KOREA	28
SHORTAGE OF		CHOMBANG-NI	72
		KANGNUNG	46
		NORTH KOREA	7,17,26,
			27,29,30
		TOKCH'ON	62
		YECH'ON	46
LOSS OF		INCH'ON	48
		INJE	70
		KOREA	51,73,76
		MAHWHI-RI	64
		MUN'YONG	60
		NORTH KOREA	30,46,67
		YONGDOK	67
MORTAR		NORTH KOREA	37
SHORTAGE OF		HWACH'ON	52
		ICH'ON	51
		INJE	64
		KUMCH'ON	68
		KUNGANGWON-NI	55
		NANAM	51
		NORTH KOREA	5,6,8,41
		P'YONGSAN	47
		YANGGU	68
SMALL ARMS		HOECH'ANG	76
		NORTH KOREA	32,33,35-38
TANK		NORTH KOREA	35
		P'YONGYANG	48
EXPLOITATION/CONFISCATION			
COMMUNICATION EQUIPMENT		HWACH'ON	40
		NORTH KOREA	40
EQUIPMENT			
WEAPONS		YANGDOK	56
MILITARY EQUIPMENT		HWACH'ON	52
		INJE	71
		KANGGYE	70
		KOREA	53
		NANAM	67
		NORTH KOREA	42

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

<u>SUBJECT</u>	<u>AREA</u>	<u>PAGE</u>
EXPLOITATION/CONFISCATION MILITARY EQUIPMENT	P'YONGCH'ANG SINUJU WONSAN YANGGU	60 69 77 71
VEHICLE TRUCK	HOEYANG	57
FOREIGN MILITARY ASSISTANCE USSR	CHINNAMP'O HAMHUNG NANAM NORTH KOREA P'YONGYANG SANSAN-NI SUKCH'ON WONSAN	66 75 67 2,42,43 67 66 67 70
INDOCTRINATION COMMUNIST MILITARY	NORTH KOREA NORTH KOREA	41 2,3,5,8,10, 12,13,15,17, 18,20,21,26, 30,38,39 59
LABOR NORTH KOREAN MILITARY ARMY	SONGHYON-NI NORTH KOREA	 18
MANUFACTURING MUNITIONS	P'YONGYANG	52
MINE COAL	KANGSO	66
NAVY UNITED NATIONS TACTICS	KOREA KOSONG NORTH KOREA YONGDOK	67 65 23 67
PERSONALITIES NORTH KOREAN ARMY ARTILLERY	CHOMBANG-NI HOEYANG IPO-RI KORANGP'O-RI KOREA KWANGJU NORTH KOREA P'YONGYANG	71 57,59 63 45,46 69 47 28,29 51
REPAIR FACILITIES ORDNANCE	IPO-RI NORTH KOREA	64 42
SCHOOL ARMY ARMORED ARTILLERY FOREIGN LANGUAGE OFFICER CANDIDATE	SAKCHU TUNG-HUA SADONG P'YONGYANG TAEAN-NI KOCHANG-NI NANAM NORTH KOREA P'YONGYANG NORTH KOREA YENAN	42 42 75 66 41 42 42 6,41 42 6,41 42

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

<u>SUBJECT</u>	<u>AREA</u>	<u>PAGE</u>
STORAGE		
AMMUNITION	HOEYANG	54
	IPO-RI	59
	KANGSO	66
	NORTH KOREA	22
SUPPLY		
AMMUNITION	HOEYANG	57
	INJE	54
	IPO-RI	63
	KAESONG	47
	KANGSO	66
	KOREA	53,58,69
	KOSONG	65
	KUNGANGWON-NI	55
	LUNG-CHING-TS'UN	64
	MANCHURIA	55,76
	MARHWI-RI	63
	NORTH KOREA	24,35,59
	SINANJUNG-RI	55
	T'ONGCH'ON	61
	WONJU	56
	YONCH'ON	66
SHORTAGE OF	CHOMBANG-NI	72
	ICH'ON	51
	INJE	70
	KOREA	55,71,75-77
	KOSONG	65
	NORTH KOREA	5,17,23,26,41
	P'YONGCH'ANG	60,62
	TOKCH'ON	62
	WONJU	56
	YONGCH'ON	62
ARTILLERY	HOEYANG	54
COMMUNICATION EQUIPMENT		
SHORTAGE OF	KOREA	55
MILITARY EQUIPMENT	CHINNAMP'O	67
	KAESONG	47
	KANGGYE	71
	KUNGANGWON-NI	55
	MANCHURIA	72
	TAEJU	60
LOSS OF		
MOVEMENT OF		
AMMUNITION	NORTH KOREA	22,23
PONTOON	NORTH KOREA	19
WEAPONS	NORTH KOREA	43
ARTILLERY	MANCHURIA	62
	NORTH KOREA	52
VEHICLE		
TRUCK	SINDOK-TONG	46
WEAPONS	HOEYANG	52
	IPO-RI	61
	KAESONG	47
	KANGGYE	70,71
	KOREA	69
	KOSONG	65
	KUMSONG	63
	MARHWI-RI	63
	NAJIN	61
	NANAM	51
	NORTH KOREA	2
	P'YONGCH'ANG	60
	P'YONGYANG	51
	T'ONGCH'ON	61

~~SECRET SECURITY INFORMATION~~

UNCLASSIFIED

<u>SUBJECT</u>	<u>AREA</u>	<u>PAGE</u>
SUPPLY		
WEAPONS		
ARMORED	SINUJU	48
ARTILLERY	HAERU	49
	HOEYANG	57
	INJE	53,58
	KAEJON	66
	KANGGYE	62
	LUNG-CHING-TS'UN	64
	MANCHURIA	55,74
	PAI-RI	58
	SEOUL	49,76
	SINUJU	48
CHART OF	NORTH KOREA	32
SHORTAGE OF	HAERU	50
	KANGGYE	70
	NORTH KOREA	50
	YANGDOK	46,56
CHART OF	NORTH KOREA	38
RESUPPLY	SINDOK-TONG	46
SHORTAGE OF	CH'OSAN	46
	HAERU	48
	KANGGYE	52,70
	KOREA	77
	NORTH KOREA	44
	NUCHON-NI	74
	P'YONGCH'ANG	60,62
SOURCE OF	YANGGU	51
TANK	HAERU	49
TOPOGRAPHY	KOREA	29,67
	NORTH KOREA	17
RIVER	KAEJON	66
	KOREA	13,19,73,75,76
	NAKTONG-NI	68
	PUGONG-NI	51
	SEOUL	46,49
TRANSPORTATION		
RAILROAD	NORTH KOREA	2
ROAD	KOREA	67
	NORTH KOREA	2,18
DESTRUCTION OF	NORTH KOREA	19
REPAIR OF	NORTH KOREA	19

UNCLASSIFIED

~~SECRET SECURITY INFORMATION~~